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U.S. Army Toxic and Hazardous Materials Agency

FINAL REPORT

GAITHERSBURG NIKE CONTROL AND LAUNCH AREA
PRELIMINARY ASSESSMENT/SITE INSPECTION
GAITHERSBURG, MARYLAND

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Prepared for

U.S. Army Toxic and Hazardous Materials Agency
Aberdeen Proving Ground
Aberdeen, Maryland 21010-5401

Prepared by

EA Mid-Atlantic Regional Operations
EA Engineering, Science, and Technology, Inc.

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| 19. ABSTRACT (Continue on reverse if necessary and identify by block number) This report summarizes the findings of the Preliminary Assessment/Site Inspection study completed at the former Gaithersburg Nike Launch and Control Site by EA under contract to USATHAMA. This study was conducted to assess the environmental conditions at this facility relative to past Army operations. The control area has been identified for closure in the Base Realignment and Closures report completed by the Defense Secretary's Commission in December 1988. The Launch and Control Sites are located 1.5 miles apart and a separate, though similar, sampling plan was developed for each site. Ground-water, surface water, surface sediment and soil samples were collected and analyzed for priority pollutant parameters at these sites. The assessment of the data collected indicates that no compounds exceeded current maximum contaminant levels (MCL). The future use of ground-water at these sites should be considered when decisions are made relative to conducting additional sampling or studies at these sites. During the course of this PA/SI a number of potential environmental areas of concern that were not addressed in the scope of this PA/SI are also cited in the report. Additional work is planned by USATHAMA to address these concerns. <i>Keywords: Guided missiles, Environmental impact</i> | | | | | | |
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EXECUTIVE SUMMARY

EA Engineering, Science, and Technology, Inc. (EA) conducted a Preliminary Assessment/Site Inspection (PA/SI) at the former Gaithersburg NIKE Control and Launch areas located in Gaithersburg, Maryland for the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) under Contract No. DAAA15-88-0005. The objective of this PA/SI was to evaluate the site environmental conditions relative to the past Army operations. An update of the Initial Installation Assessment (IIA) was conducted in 1987 at the study areas and consisted of a records search. The purpose of the update report was to review the 1980 report in terms of changes in environmental regulations or mission relative to the findings of the previous report. Based on the information reviewed during these assessments and other USATHAMA NIKE reports, the waste solvents, petroleum, oil and lubricants used during normal Army operations were disposed of in rock-lined gravel pits and in the septic system. These waste disposal practices have led to ground-water and soil contamination at other former NIKE sites. This potential for contamination and the excessing actions that have been proposed for the former Gaithersburg Launch and Control sites have led to the undertaking of this PA/SI project.

The NIKE Control and Launch areas are located approximately 1.5 mi apart and a separate, though similar, work scope was developed for each site. The respective sampling plans were designed to address the potential ground-water, surface water and soil contamination associated with past Army operations. Four ground-water monitoring wells were installed at both sites from which ground-water samples were collected and analyzed. Eight soil samples were collected for analysis, five at the Launch and three at the Control site. A surface water and surface sediment sample were collected from a stream located close to the Launch area. Also included in the scope-of-work at the Launch site was an inspection of the three missile storage structures to evaluate the potential for environmental problems.

Site features of additional environmental concern not fully addressed in this PA/SI included five underground storage tanks; four at the Control Area and one at the Launch Area, an asbestos survey of the buildings, a lead paint survey, a dry well at the Control area and PCB transformers. These concerns are to be addressed in a subsequent investigation to this PA/SI, conducted by USATHAMA.

The samples collected during this PA/SI study were analyzed for the complete Priority Pollutant Parameter List, which includes volatile and semi-volatile organics, total cyanide and phenols, pesticides, PCBs, and dissolved metals. The assessment of the data obtained from these samples involved comparing the data to the established regulatory criteria to characterize the potential for contamination that may be attributed to past Army operations. The evaluation of this data indicates that no compounds were detected above any current Maximum Contaminant Levels (MCL). Low levels of a phthalate compound were detected in six samples, however, there are no regulatory criteria for these compounds. These compounds are common components of plastics and their detection is probably due to laboratory contamination. Cadmium was detected in nine of ten water samples including the field blank at levels between the current MCL of 10 µg/L and the proposed MCL and MCLG (Maximum Contaminant Level Goal) of 5 µg/L. The source of this metal is indeterminate and the detection of cadmium in the field blank brings into question the validity of the data. Lead was detected in the ground-water sample from GNL-3 at 35 µg/L. This level is lower than the current MCL of 50 µg/L but higher than the proposed MCL of 5 µg/L and proposed MCLG of 0 µg/L. If the current MCL is lowered in the future to the proposed MCL, the lead level detected in GNL-3 during this study would be an excessive value. Heptachlor, a pesticide compound, was detected at low levels in five field samples at the Launch site, plus the field and method blank. The detection of this compound can be attributed to laboratory contamination based on the detection of the compound in the method blank. The soil sample analytical data exhibited values within the expected background ranges for soils typical of the site.

The future use of these sites and in particular the potential for ground-water use should be considered when decisions are made concerning the need for additional ground-water monitoring. Both of these sites are in close proximity to a municipal water system and it is likely that this system would supply water to the sites instead of relying on ground-water. If, however, the future site development plans include ground-water use, an additional comprehensive ground-water sampling event is recommended to provide a greater level of assurance beyond a single sampling round. Additional sampling, if performed, should attempt to confirm or deny the cadmium levels in the water samples and provide additional data on the lead level in the ground-water sample from GNL-3.

1. INTRODUCTION

The former Gaithersburg NIKE Launch and Control area is located northeast of Gaithersburg, Maryland, in Montgomery County, approximately 30 mi north of Washington, D.C. as shown on Figure 1-1. The combined area of the facility, less easements, is approximately 30 acres. The facility consists of two separate sites, the NIKE Control and Launch areas located approximately 1.5 miles apart. Detailed Launch and Control area site maps are provided as Figures 1-2 and 1-3, respectively. These figures are on plan sheets and are located in separate back pockets.

The Control Area is surrounded by single-family residences and is not being used in any capacity at the present time. The Control area was identified for closure in the Base Realignments and Closures Report completed by the Defense Secretary's Commission in December 1988. In this report the Control area was referred to as the Army Reserve Center, Gaithersburg, Maryland. The surrounding land use at the Launch Area presently consists of a mixture of single-family residences and farm land. An active U.S. Army Reserve Headquarters office has been constructed on the front portion of the Launch Site.

Three missile launching pads and separate fueling, generator, assembly, storage, and wastewater disposal areas can be identified at the former Launch Area. The missile launching pads consist of three concrete structures, approximately 17 ft deep, used to store the missiles. In addition to these features, a 1,000-gal fuel oil underground storage tank (UST) was not removed from the Launch area during the course of this investigation. Surface runoff is directed towards a small surface stream located along the southern site boundary.

The former mess hall, barracks, administration, engine generator and frequency changer buildings are located at the Control area, along with the wastewater treatment and disposal areas. Three fuel oil (two 1,500 and one 2,000 gallon) and one 6,000 gallon gasoline UST were located at the Control area and were removed during this investigation.

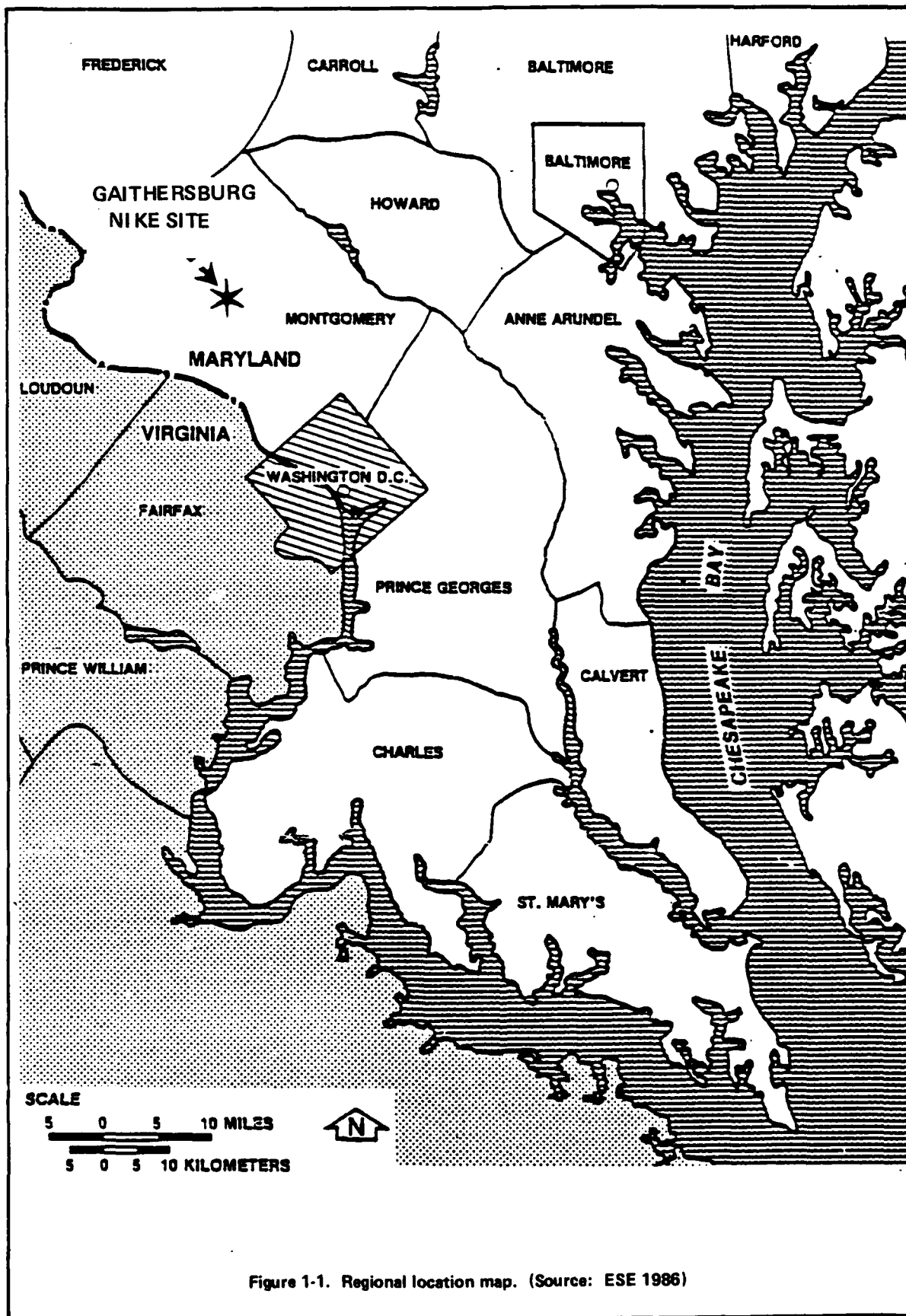


Figure 1-1. Regional location map. (Source: ESE 1986)

The former Gaithersburg NIKE Launch and Control area was owned and operated by the Department of the Army (DA) from 1956 to 1962. During this time the Army constructed the NIKE-Ajax Missile Control and Launch Areas at this site. The site was named the Gaithersburg Support Facility--NIKE Ajax Site W-94. In 1962, the DA transferred this facility to the Department of the Navy (DN), which used the facility for communications research. In 1968 the Harry Diamond Laboratories (HDL) began using the former Launch facility for radar research. In March 1972, the property was transferred to HDL and named Gaithersburg Research Facility (GRF). HDL activities involved constructing, maintaining, and testing of electronic and mechanical systems to track aircraft. HDL utilized this site until 1979, after which it was transferred to Fort George G. Meade (FGGM).

The purpose of the Preliminary Assessment/Site Inspection (PA/SI) was to design and conduct a field sampling plan that included ground-water, surface water, surface sediment, and soil sample collection and chemical analysis to address the potential for environmental contamination associated with past Army operations. The assessment of this data focused on whether there was a need for further environmental work.

Section 2 of this report provides an overview of the NIKE Missile System including a description of site features, operations, and types of waste generated. Section 3 includes information on the geology and topography from a regional and local perspective. Section 4 describes the various field methods and procedures utilized during the field investigation. Section 5 includes the assessment of environmental conditions at the Launch and Control areas. Each site has been characterized relative to specific site features and the analytical data and results of field activities and are provided in this section. Section 5 is followed by conclusions and recommendations that were developed based on the findings from this PA/SI study.

2. NIKE MISSILE SYSTEM OVERVIEW

2.1 GENERAL

Between 1954 and the early 1970s, NIKE Ajax and NIKE Hercules missile batteries were constructed throughout the continental United States. Maintenance of the batteries by the U.S. Army required the storage, handling, and disposal of missile components and propellants as well as solvents, fluids, fuels, and other materials necessary for support activities. General operation procedures used at the NIKE sites were relatively consistent from site to site although specifics of material handling and disposal varied from individual batteries. (McMasters et al., 1983)

2.2 DESCRIPTION OF MISSILES, BATTERIES, AND EQUIPMENT

NIKE Ajax missiles were first deployed in 1954 and remained in use until 1964. The NIKE Ajax was a two-stage supersonic missile armed with three high-explosive warheads. The missile utilized a solid-fueled booster and a liquid-fueled sustainer motor to deliver the high explosive warheads to a radar-determined point. The first stage was powered by the XM-5 booster, which burned a cast, double-based solid propellant. The second stage burned JP-4 jet fuel with inhibited red fuming nitric acid (IRFNA) as an oxidizer. The starter fluid originally consisted of aniline/furfuryl alcohol, later replaced by unsymmetrical dimethyl hydrazine (UDMH).

The NIKE Hercules missile, introduced in 1958, gradually replaced the Ajax and remained in use until the mid-1970s. The NIKE Hercules was a two-stage missile which differed from the Ajax in that the sustainer motor was solid fueled and the warhead was primarily nuclear. The first stage of the missile was powered by a solid-propellant XM-5 cluster. The second stage sustainer motor initially burned a mixture of 40 percent UDMH and 60 percent JP-4, which was replaced by motors fueled by JP-4 with IRFNA as an oxidizer. However, continual malfunction of the motors

led to replacement by a solid-propellant sustainer motor of the XM-30 series. This model was fueled by an ammonium perchlorate-type propellant.

Typical NIKE batteries consisted of two main operating areas: the Control Area and the Launch Area. Equipment limitation necessitated that the two areas could not be closer to each other than 900 meters and could be no farther than 3.5 kilometers apart. The Control Area contained all radar, guidance, electronic, and communication equipment for missile guidance and fire control. In addition, an electric generator building and motor pool may have been located on the site. The Launch Area contained the facilities and equipment required to assemble, test, and maintain the missiles and associated launchers. Maintenance facilities generally included the motor pool and generator buildings in addition to the defuel/refuel facilities. The generator building and motor pool were normally equipped with a 1-2 m³ gravel pit sump where oil, solvents, and paints were routinely dumped and allowed to soak into the ground. Some Launch batteries had an additional rock-filled pit in the defuel/refuel area which was used for IRFNA disposal. Fuel storage tanks were common at both the Control and Launch Areas. Most bulk storage was in USTs, although above-ground tanks were also used.

2.3 GENERAL WASTE SOURCES

Past NIKE operations utilized and generated a significant quantity of hazardous material and waste. Consequently, the potential for pollution of surface water, ground water, soil, and sediment is a matter of concern. Table 2-1 is a summary of potential environmental releases at a NIKE missile battery. Past operations included fueling and defueling, support equipment maintenance and repair, and material handling and storage. There were several categories of hazardous waste associated with past NIKE operations, including liquid missile fuel (JP-4); starter

TABLE 2-1 SUMMARY OF POTENTIAL ENVIRONMENTAL RELEASES AT A NIKE MISSILE BATTERY

| Contaminant | Quantity Used (L/year) | Area of Use (a) | Routine Disposal Methods | | Incidental Releases | Dates |
|--|---------------------------|-----------------------|-----------------------------|--------------|------------------------|-----------|
| | | | Primary | Secondary | | |
| Carbon tetrachloride | 1,000-2,000 | LA, Motor Pool | Sump | Surface Dump | — | 1954-1962 |
| Trichlorethylene | 360-1,400 | LA, Motor Pool | Sump | Surface Dump | — | 1956-1970 |
| Trichlorethylene | 1,000-2,000 | LA, Motor Pool | Sump | Surface Dump | — | 1958-1964 |
| IRFNA ^(b) | 500-1,500 | Fuel/Defuel | Sump | Turn-in | Line Rupture | 1954-1964 |
| Aniline-furfuryl ^(b) alcohol | 20-30 | Fuel/Defuel | Turn-in | Dump/Burial | Line Rupture | 1954-1958 |
| UDMH ^(b) | 20-30 | Fuel/Defuel | Turn-in | Dump/Burial | Line Rupture | 1956-1964 |
| Battery Electrolyte | 100-300 | LA, Motor Pool | Sump | Sewer | — | 1954-1978 |
| JP-4 ^(b) | 2,000-3,000 | Fuel/Defuel | Turn-in | — | Leakage | 1954-1978 |
| Diesel/Gasoline | 50,000-100,000 | Motor Pool, Generator | Consumptive Use | — | Leakage | 1954-1978 |
| Stoddard Type II | 2,000-4,000 | LA, Motor Pool | Sump | Turn-in | — | 1965-1978 |
| No. 2 Fuel Oil | 20,000-50,000 | LA, Housing | Consumptive Use | — | Leakage | 1954-1978 |
| Motor Oil | 400-600 | Motor Pool | Turn-in | Sump | — | 1954-1978 |
| Hydraulic Fluid | 1,900-3,780 | LA, Motor Pool | Sump | — | Line Rupture | 1954-1978 |

(a) LA = Launch area.

(b) Ajax only.

Source: McMaster et al. 1983.

fluids (UDMH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The most common liquids disposed of onsite were solvents used in maintenance operations. These were routinely dumped into sumps where they soaked into the ground. Fuel components were sometimes disposed of in this manner, but to a more limited extent.

2.4 WASTE CATEGORIES

2.4.1 Chlorinated Solvents

A variety of chlorinated organic solvents were used at former NIKE installations. Solvents were utilized for support vehicle, generator, missile, and launcher maintenance and cleaning. Initially, carbon tetrachloride was widely used as a multipurpose solvent, gradually being replaced by trichloroethylene and trichloroethane. These compounds are nonreactive in the environment and can be persistent once introduced into ground water, especially where ground-water movement is slow.

2.4.2 Hydrocarbons

A wide variety of hydrocarbon products were used or stored on NIKE sites. Common types included JP-4, gasoline, diesel fuel, fuel oil, motor oil, and hydraulic fluid. A large portion of the petroleum products were used for missile and support equipment operation. Most of the hydraulic fluid used was contained in the missile launchers.

2.4.3 Inhibited Red Fuming Nitric Acid (IRFNA)

The sustainer propellant for the NIKE Ajax missile consisted of JP-4 and IRFNA. IRFNA consists of nitrogen dioxide dissolved in nitric acid.

Aniline-furfuryl alcohol, later replaced by UDMH, was used as a starter fluid for Ajax missiles.

2.4.4 Other Wastes

In addition to the previous three categories, there are other hazardous materials and wastes that are not associated with any of the other categories. These include battery electrolyte (containing lead), and possibly PCB transformer fluid.

2.4.5 Use and Disposal Practices

The contaminants reported were generated primarily by maintenance activities. In general, the missile fuels and oxidizers were carefully controlled; however, some batteries reportedly disposed of IRFNA routinely onsite.

Most NIKE sites were equipped with sumps for disposing liquid waste. The liquid disposed of in these sumps was allowed to soak into the ground. The wastes used and generated at the former Gaithersburg NIKE Control and Launch sites were reportedly disposed of in the septic system or leach pits present at each site. The extent of disposal operations at most NIKE sites is unknown.

3. GEOLOGY/TOPOGRAPHY

3.1 REGIONAL

The project area lies within the Eastern Division of the Piedmont Physiographic Province. The Piedmont in the project area is underlain by closely folded rocks of sedimentary origin which have been metamorphosed and intruded by granite and mafic rocks. The complex generally trends northeast - southwest, approximately parallel to the Fall Line which marks the boundary between the crystalline rocks of the Piedmont Province and the sedimentary rocks of the Coastal Plain Province. Figure 3-1 shows the physiographic provinces of Maryland and the location of the Fall Line. Figure 3-2 shows the geology of the Gaithersburg NIKE Launch and Control area which is underlain by the upper pelitic schist facies of the Wissahickon Group. This facies is described as a low-grade metamorphic rock containing albite, chlorite, muscovite, quartz, and accessory minerals. The Wissahickon strata have been severely deformed and contorted (Geologic Map of Maryland 1968). Soil types developed on this rock are well drained, strongly sloping, and micaceous with a silt loam texture (Soil Conservation Service 1961).

The landscape developed on these rock and soil units is characterized by undulating topography deeply dissected by streams. Figure 3-3 shows the locations and topography of the Launch and Control sites. The Control Area is located within the Whetstone Run Basin. The Launch Area is located within the Cabin Branch drainage basin. Both of these streams flow west into Great Seneca Creek. The surface elevations of the former NIKE Control and Launch Areas are both about 510 ft above mean sea level.

3.2 SITE GEOLOGY

Data from the monitoring well borings at the site (Appendix A) reveals that both the Control and Launch Areas are underlain by a relatively

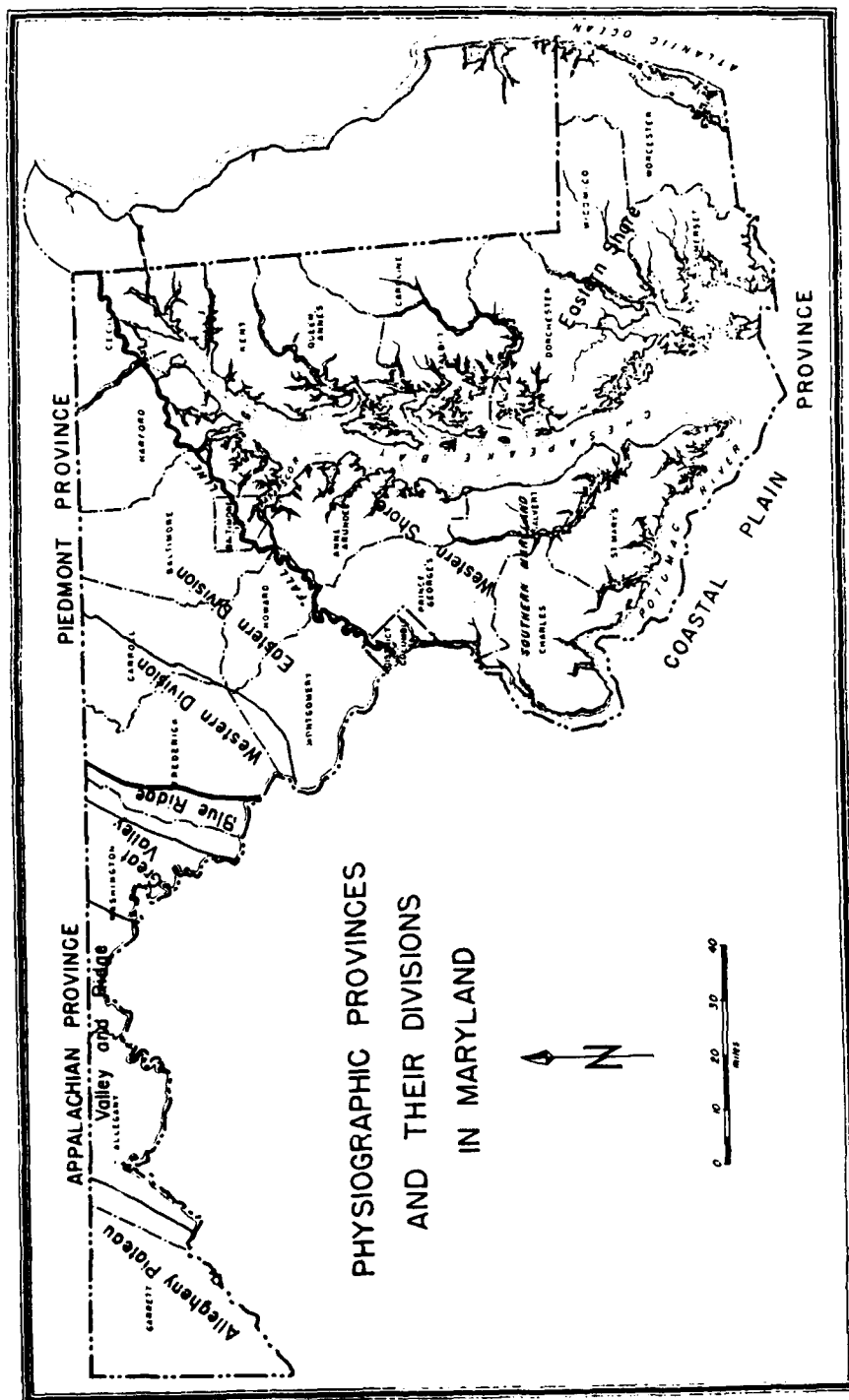


Figure 3-1. Physiographic provinces and their divisions in Maryland (Source: Vokes and Edwards, 1974).

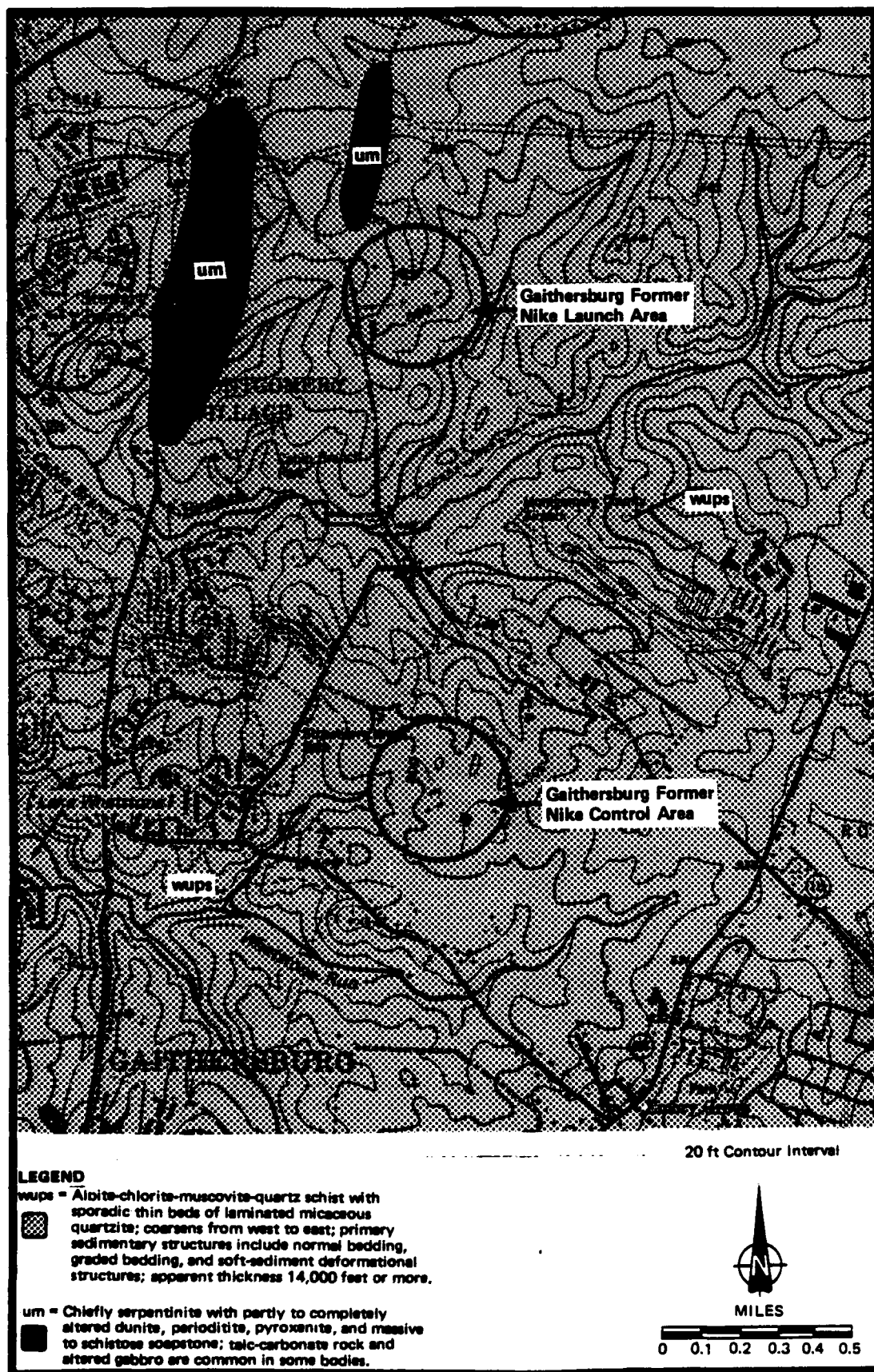


Figure 3-2. Geology of the former Gaithersburg Nike Launch and Control areas.
(Source: Modified from MD Geologic Map 1968)

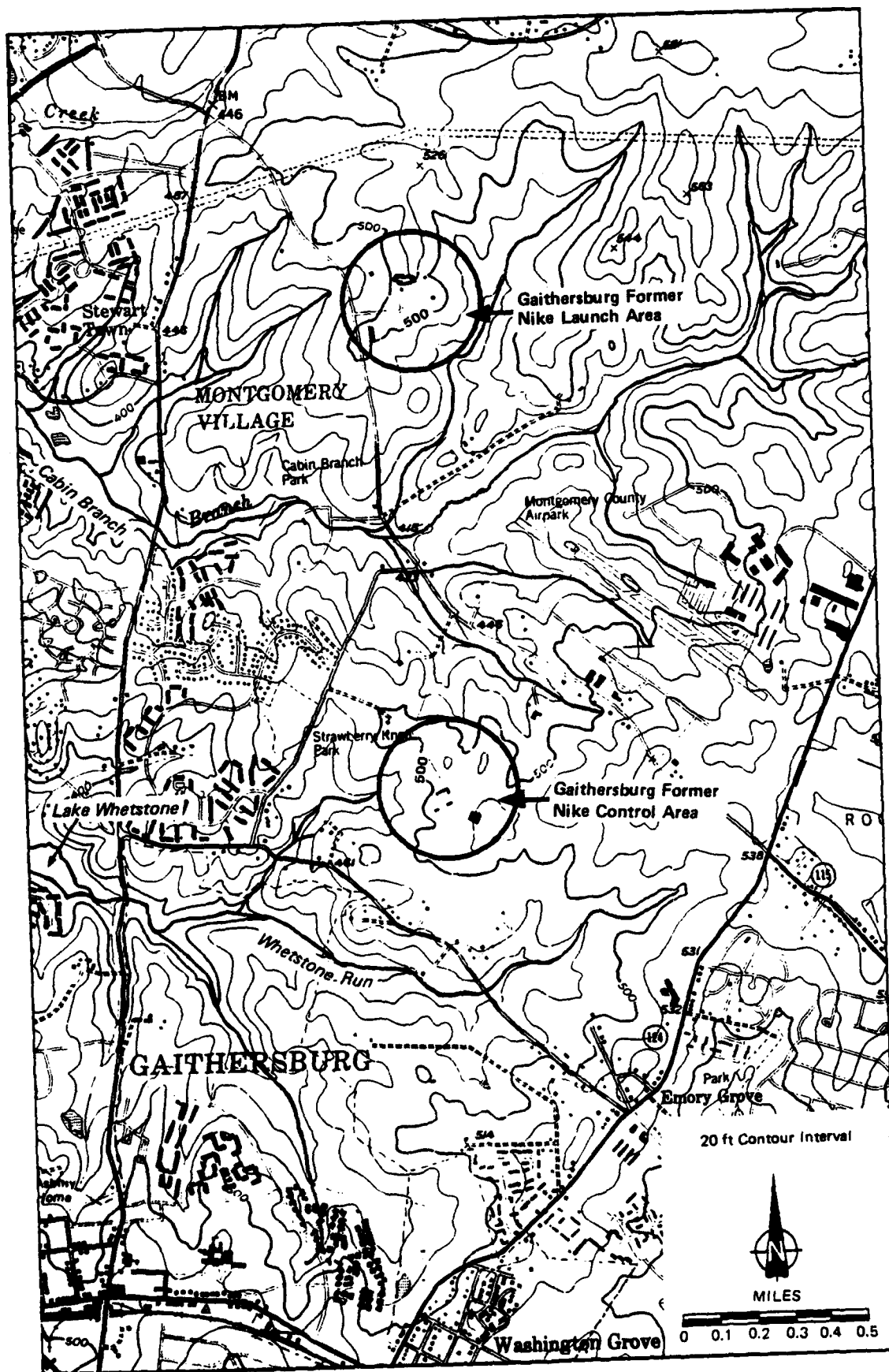


Figure 3-3. Locations and topography of Gaithersburg former Nike Launch and Control areas.
 (Source: Gaithersburg Topographic Quadrangle, 1979, U.S.G.S.)

thick sequence of decomposed (weathered) bedrock (saprolite). The saprolite consists of clayey silt and fine sand. Relic schistose texture was present in most samples. Bedrock was encountered in only one well (GNC-7) at an elevation of 484.66 ft above MSL and consisted of a greenish gray, quartz mica schist. Overlying bedrock at this location is 12-ft of saprolite.

3.3 HYDROLOGY

The relatively impermeable rock of the Wissahickon Group yields little or no interstitial water to wells. However, significant supplies are found in the faults, joints, and fractures within the rock and in the mantle of saprolite overlying bedrock. The bedrock aquifer is an important water source in Montgomery County. The average well yield of the upper pelitic schist facies of the Wissahickon Group is 11 gpm. An aquifer test near the project area indicated that the transmissivity of the bedrock aquifer is about 3,000 gal/day/ft² (Ground-Water Occurrence in the Maryland Piedmont 1969; Water Resources of Howard and Montgomery Counties 1954). Monitoring wells at both the Control and Launch Areas were screened in the saprolite (clayey silt and sand), except for GNC-7 which is partially screened (= 8-ft) in competent bedrock.

4. FIELD INVESTIGATION

4.1 MONITORING WELL INSTALLATION

A total of eight monitoring wells were installed at the former Gaithersburg NIKE Control and Launch sites. At each site four monitoring wells, one upgradient well and three wells positioned downgradient of potential sources of onsite contamination were installed. Well installation was performed by Hardin-Huber Associates under subcontract to EA. Well installation, development, and sampling were performed in accordance with the Geotechnical Requirements for Drilling, Monitoring Wells, Data Acquisition, and Report, U.S. Army Toxic and Hazardous Materials Agency (revised March 1987). Wells were used for ground-water sampling and to evaluate water-table gradient, general ground-water flow directions, and in situ permeabilities.

4.2 BORINGS

The soil borings for monitoring wells were advanced through overburden using a Mobile B-61 drill rig equipped with hollow-stem augers (8-in. O.D., 3-3/8-in. I.D.). When competent bedrock was encountered (auger refusal), the hole was reamed with 12-in. O.D., 8-in. I.D. hollow stem augers. The large augers were left in the hole to serve as temporary casing and a 7-7/8-in. roller bit was inserted inside the augers in order to drill to the necessary depth for monitoring well installation. The drill rig, drill tools, and associated equipment were steam cleaned prior to drilling at each monitoring well location. No grease or oil was applied to drill rods, augers, or tools used in the boreholes.

Soil samples were collected at the surface and at 5-ft intervals thereafter utilizing a 24-in. long, 2-in. O.D., 1-3/8 I.D. split-spoon sampler. The sampler was driven 18 in. with a 140-lb. drop hammer, free falling 30 in., in accordance with ASTM-D 1586-84 specifications. The

subcontractor provided EA's supervising geologist with the number of blows required to drive the sampler each 6 in. of penetration. All split-spoon samples were screened in the field using a photo-ionization detector (PID), classified in accordance with Unified Soil Classification System (USCS) specifications and Munsell Color Chart, and logged (Appendix A). The samples were placed in glass jars and appropriately labeled and will be retained by EA until final report acceptance.

4.3 WELL CONSTRUCTION

Upon completion of the borehole, a monitoring well was installed using the following material and methods.

- . Monitoring well borings were 7-7/8-in. in diameter to permit approximately 2 in. of annular space between boring and centered well casing and screen.
- . All monitoring well riser casing and screen consisted of 4-in. I.D., Schedule 40 polyvinylchloride (PVC), flush joint, threaded pipe.
- . The screened interval consisted of 10 to 15-ft factory slotted (0.01-in.) well screen sealed at the bottom with a PVC cap or plug.
- . All screen-to-riser and riser-to-riser sections were joined by flush-joint, threaded coupling. No solvents or glues were used.
- . The well screen and riser casing were installed and a No. 2 quartz sand filter pack was placed around the screen and casing from the base to a minimum of 5 ft above the top of the screen.

- . A minimum 5-ft thick impervious seal of bentonite pellets was placed directly on top of the sand pack. The seal was measured immediately after placement, without allowance for swelling.
- . Following bentonite seal emplacement, the well annulus was continuously pressure-grouted via tremie pipe from the top of the bentonite seal to the ground surface with a 20:1 cement-bentonite grout with a maximum 7 gal of approved water per 94-lb bag of cement.
- . 6-in. steel outer casing was placed around the PVC well stickup and secured in grout. The steel casing, rising 24-36 in. above ground level, was provided with lock and cap.
- . A 3 ft², 6-in.-thick concrete pad was constructed around the well casing at final ground-level elevation. Three 5-ft-long, 3-in. O.D. steel protective posts filled with concrete were placed 2.5 ft above ground, equally spaced around the well and embedded in the concrete pad.

4.4 WELL DEVELOPMENT

After well installation, but no sooner than 48 hours after grouting was completed, development was accomplished by air lift/surge, pumping and bailing. During development, pH, temperature, and specific conductance were monitored and recorded. Development continued until a minimum of five well volumes were removed, the water was clear to the unaided eye, and three consecutive pH, temperature, and specific conductivity measurements did not vary by more than 10 percent.

4.5 AQUIFER TEST

In situ hydraulic conductivities were calculated for selected wells at the Launch and Control areas utilizing the slug test method developed by Bouwer and Rice (1978). This procedure is applicable to fully and partially penetrating wells within an unconfined aquifer. The test method involved the removal of a known volume (slug) of ground water and the measurement of elapsed time during the recovery phase. Water level measurements and elapsed time intervals were recorded utilizing an In-situ, Inc. Hermit Model SE-1000B remote data logger and pressure transducer. The data logger recorded depth to water measurements during the recovery phase at logarithmic time intervals immediately after slug removal. Water levels were recorded until at least 90 percent recovery to the static water level was achieved. A computer program based on Bouwer's slug test methodology was used. Elapsed time versus residual water level was computer graphed and used to calculate hydraulic conductivity (K) according to the following equation:

$$K = \frac{R_c^2 \ln (R_e/R_w)}{2 L_e} \frac{1}{t} \frac{\ln y_o}{y_t}$$

where

R_e = effective radial distance over which the head difference y is dissipated

R_w = radial distance between well center and undisturbed aquifer (r_c plus thickness of gravel envelope or developed zone outside casing)

L_e = height of perforated, screened, uncased, or otherwise open section of well through which ground water enters

y_0 = y at time zero

y_t = y at time t

t = time since y_0

R_c = radial distance of well casing

4.6 GROUND-WATER SAMPLING

Prior to sampling, a physical inspection of each well and surrounding area was performed. This included, but was not limited to, an inspection for evidence of tampering, physical damage, and breakage or heaving of the concrete pad. Such information was recorded on well purging and sampling forms. After the inspection, static water levels were determined from all wells prior to initiation of any purging and sampling activities. The water level determinations were made to the nearest 0.01 ft relative to the top of the PVC well casing utilizing an electric water-level sounder. Between each well, the probe and cable were cleaned by wiping with a paper towel saturated with DI water as the probe was retrieved. Water level data were used to prepare water-level contour maps and to calculate the static volume of water in the casing.

Prior to sample collection, the wells were purged in order to ensure that the sample collected was representative of the ground water. Purging was accomplished with the use of a stainless steel submersible pump or polyvinylchloride (PVC) bailer. Purging continued until five well volumes of water were removed or the well was purged dry. In the event that the well purged dry, the well was allowed to recover and was purged dry a second time before sampling. Purged water was discharged from the well in a downgradient direction to minimize the potential for surface infiltration. Only sample gear that had been properly cleaned in accordance

with USATHAMA Reference QA Plan was used. Between wells, the pump and associated plumbing were pressure jetted with clean water. The pump and hose interior was cleaned by pumping water through the entire system. Ground-water sampling was accomplished with a dedicated, laboratory-cleaned, bottom-filling Teflon bailer. A clean, dedicated piece of polypropylene or nylon line was used to lower each bailer into the well. Samples for volatile organic compounds were collected in a manner that minimized aeration and were stored in containers free of bubbles and headspace. Samples collected for metals analysis were filtered using a 0.45- μ membrane filter. During sampling, an aliquot of ground water was monitored to determine pH, temperature, and specific conductance utilizing calibrated and standardized instruments. Field sampling records are presented in Appendix B. After collection, all samples were placed securely on ice in a cooler for transport to the laboratory. To ensure sample integrity, all ground-water sampling was accomplished under the protocol for chain-of-custody and sample handling established in the QA/QC Plan.

4.7 SURFICIAL SOIL SAMPLING

Soil samples were collected 1-3 ft below the surface at selected sampling locations. Samples were obtained by advancing a 4-in. stainless steel hand auger to the top of the sample interval. Next, a stainless steel trowel was used to collect the sample. Between each sample, all sampling equipment was cleaned as follows: (1) wash with detergent; (2) rinse with deionized (DI) water; (3) rinse with DI water. Upon collection, samples were placed in the specified containers, labeled, and placed on ice.

5. ENVIRONMENTAL CONTAMINATION INVESTIGATIONS

This section provides information on the field sampling plan, site characterization, and data assessment relative to the separate Launch and Control area environmental investigations. A field sampling plan was designed for each site that included installation of monitoring wells for ground-water and soil sample collection and analysis to address the potential for environmental problems associated with past Army operations. All samples were analyzed for the complete Priority Pollutant parameter list including: volatile organic compounds (VOC), semivolatile organic compounds (SVOC), total cyanide and phenols, dissolved metals, pesticides, and polychlorinated biphenyls (PCB). Table 5-1 provides the certified reporting limit (CRL) for certified compounds and detection limit for non-certified compounds for the Priority Pollutant list compounds. Table 5-2 exhibits the ground water quality regulatory criteria which were used to evaluate the data obtained during this study.

5.1 FORMER NIKE LAUNCH AREA SITE

5.1.1 Field Sampling Plan

The NIKE Launch Area sampling plan included the installation of four monitoring wells from which ground-water samples were collected and analyzed. Four soil samples and one surface water and sediment sample were also collected for analysis. An inspection of the missile storage structures was performed to evaluate the environmental conditions and potential problems. Locations of the monitoring wells are shown on Figure 1-2. Well GNL-1 was located upgradient of the acid storage and refueling platform and serves as the upgradient well for the entire site. The three remaining wells were installed downgradient of potential sources of contamination. Monitoring wells GNL-2, GNL-3, and GNL-4 are located downgradient of the electric shop, missile storage structures, and wastewater disposal area, respectively. Well completion diagrams and soil boring logs are provided in Appendix A.

TABLE 5-1 CERTIFIED REPORTING LIMITS (CRL) FOR CERTIFIED COMPOUNDS AND
DETECTION LIMITS FOR NON-CERTIFIED COMPOUNDS FOR PRIORITY
POLLUTANT PARAMETER LIST.

| Analytical Method | WATER (µg/L) | | SOIL (µg/g) | |
|-----------------------------|--------------|--------|-------------|--------|
| | CRL | | CRL | |
| | ICP | GFAA | ICP | GFAA |
| INORGANICS | | | | |
| <u>Group A - Metals</u> | | | | |
| Antimony | 2.1700 | | | 0.3730 |
| Arsenic | 2.9200 | | | 2.2200 |
| Beryllium | 2.9200 | | 0.3310 | |
| Cadmium | 4.0900 | | 0.9510 | |
| Chromium | 4.4400 | | 9.3100 | |
| Copper | 6.2000 | | 6.2900 | |
| Lead | | 2.1600 | 92.3000 | |
| Nickel | 16.2000 | | 1.8200 | |
| Selenium | | 6.5200 | | 1.9500 |
| Silver | 5.5600 | | 0.6990 | |
| Thallium | 90.4000 | | | 2.3200 |
| Zinc | 5.3500 | | 8.3800 | |
| CVAA | | | | |
| Mercury | .1000 | 0.0179 | | |
| <u>Group A - Non-Metals</u> | | | | |
| Cyanide | 5.0000 | | 19.8000 | |
| Phenols | 39.3000 | | 3.6200 | |

Note:

ICP - Inductively Coupled Plasma

GFAA - Graphite Furnace Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

TABLE 5-1 (Continued) - VOLATILE ORGANICS

| | Water (µg/L) | | Soil (µg/g) | |
|--|--------------|-----------------|-------------|-----------------|
| | CRL | Detection Limit | CRL | Detection Limit |
| VOLATILE ORGANICS | | | | |
| <u>Group B - Purgeable Organics</u> ⁽¹⁾ | | | | |
| Benzene | 1.70000 | | .00480 | |
| Carbon tetrachloride | 1.00000 | | .00200 | |
| Chlorobenzene | 1.20000 | | .00200 | |
| 1,2-Dichloroethane | 1.00000 | | .00480 | |
| 1,1,1-Trichloroethane | 1.00000 | | .00590 | |
| 1,1-Dichloroethane | 2.70000 | | .00730 | |
| 1,1,2-Trichloroethane | 1.70000 | | .00280 | |
| 1,1,2,2-Tetrachloroethane | 5.0000 | | .00500 | |
| Chloroethane | 6.90000 | | .12000 | |
| 2-Chloroethylvinyl ether | 1.60000 | | .00500 | |
| Chloroform | 1.00000 | | .01500 | |
| 1,1-Dichloroethylene | 6.80000 | | .01200 | |
| trans-1,2-Dichloroethylene | 2.20000 | | .00610 | |
| 1,2-Dichloropropane | 3.20000 | | .01000 | |
| 1,3-Dichloropropene (cis and trans) | | 5 | | .005 |
| Ethylbenzene | 1.40000 | | .0100 | |
| Methylene Chloride | | 5 | | .005 |
| Chloromethane | 1.80000 | | .00450 | |
| Bromomethane | | 10 | | .01 |
| Bromoform | 3.70000 | | .00390 | |
| Bromodichloromethane | | 5 | | .005 |
| Fluorotrichloromethane | | 5 | | .005 |
| Chlorodibromomethane | 1.80000 | | .00230 | |
| Tetrachloroethene | 2.30000 | | .00790 | |
| Toluene | 1.80000 | | .00620 | |
| Trichloroethylene | 1.00000 | | .00200 | |

Note:

- 1) EPA Method 624 by GCMS
- 2) EPA Method 625 by GCMS
- 3) EPA Method 608 by GC

TABLE 5-1 (Continued) - SEMIVOLATILE ORGANICS

| | Water (ug/L) | | Soil (ug/g) | |
|--|--------------|-----------------|-------------|-----------------|
| | CRL | Detection Limit | CRL | Detection Limit |
| SEMIVOLATILE ORGANICS | | | | |
| Group C - Base/Neutral Extractables ⁽²⁾ | | | | |
| Bis(2-chloroethyl)ether | 1.60000 | | .38000 | |
| 1,3-Dichlorobenzene | 5.50000 | | .30000 | |
| 1,4-Dichlorobenzene | 6.00000 | | .29000 | |
| 1,2-Dichlorobenzene | 5.20000 | | .33000 | |
| Bis(2-chloroisopropyl)ether | | 10 | | .3 |
| Hexachloroethane | 8.20000 | | .14000 | |
| N-Nitroso-di-n-propylamine | 6.70000 | | .11000 | |
| Nitrobenzene | 4.15000 | | 5.58000 | |
| Isophorone | | 10 | | .3 |
| Bis(2-chloroethoxy)methane | | 10 | | .3 |
| 1,2,4-Trichlorobenzene | 4.60000 | | .17000 | |
| Naphthalene | 4.00000 | | .28000 | |
| Hexachlorobutadiene | 6.00000 | | .29000 | |
| Hexachlorocyclopentadiene | | 10 | | .3 |
| 2-Chloronaphthalene | 1.70000 | | .32000 | |
| Acenaphthalene | 3.70000 | | .31000 | |
| Dimethyl phthalate | | 10 | | .3 |
| Acenaphthene | 1.30000 | | .34000 | |
| Fluorene | | 10 | | .3 |
| Diethyl phthalate | | 10 | | .3 |
| 2,4-Dinitrotoluene | 5.40000 | | .46000 | |
| 2,6-Dinitrotoluene | 5.10000 | | .20000 | |
| 4-Chlorophenyl phenyl ether | | 10 | | .3 |
| N-Nitrosodiphenylamine | 1.66000 | | .84900 | |
| 4-Bromophenyl phenyl ether | | 10 | | .3 |
| Hexachlorobenzene | 2.80000 | | .35000 | |
| Phenanthrene | .85000 | | 1.60000 | |
| Anthracene | 1.10000 | | .29000 | |
| Di-n-butyl phthalate | | 10 | | .3 |
| Fluoranthene | 1.20000 | | .21000 | |
| Pyrene | 12.00000 | | .53000 | |
| Butyl benzyl phthalate | | 10 | | .3 |
| Benzo(aq)anthracene | .83000 | | .27000 | |
| 3,3'-Dichlorobenzidine | | 20 | | .7 |
| Chrysene | 1.00000 | | .190000 | |
| Bis(2-ethylhexyl)phthalate | 34.00000 | | .65000 | |
| Di-n-octyl phthalate | 18.00000 | | .35000 | |
| Benzo(a)pyrene | 4.50000 | | .16000 | |
| Indeno(1,2,3-cd)pyrene | 86.00000 | | .45000 | |
| Dibenzo(a,h)anthracene | 4.90000 | | .57000 | |
| Benzo(g,h,i)perylene | 38.0000 | | .52000 | |
| Benzo(b)fluoranthene+ | 2.40000 | | .25000 | |
| Benzo(k)fluoranthene | 2.90000 | | .22000 | |

TABLE 5-1 (Continued) - SEMIVOLATILE ORGANICS

| SEMIVOLATILE ORGANICS | Water (µg/L) | | Soil (µg/g) | |
|---|--------------|-----------------|-------------|-----------------|
| | CRL | Detection Limit | CRL | Detection Limit |
| <u>Group D - Acid Extractables</u> ⁽²⁾ | | | | |
| Phenol | .92000 | | .06580 | |
| 2-Chlorophenol | 1.31000 | | .06040 | |
| 2-Nitrophenol | 10.0000 | | .30000 | |
| 2,4-Dimethylphenol | 7.11000 | | .09930 | |
| 2,4-Dichlorophenol | 1.80000 | | .02470 | |
| p-Chloro-m-cresol | | 10 | | .3 |
| 2,4,6-Trichlorophenol | 10.0000 | | .30000 | |
| 2,4-Dinitrophenol | 50.0000 | | 2.00000 | |
| 4-Nitrophenol | 5.57000 | | .07090 | |
| 4,6-Dinitro-o-cresol | 7.50000 | | 5.46000 | |
| Pentachlorophenol | 3.50000 | | 1.25000 | |

TABLE 5-1 (Continued) - PESTICIDES

| PESTICIDES | Water (ug/L) | | Soil (ug/g) | |
|---|--------------|--------------------|-------------|--------------------|
| | CRL | Detection Limit | CRL | Detection Limit |
| <u>Group E - Pesticides/PCB⁽³⁾</u> | | | | |
| Aldrin | 0.01240 | | 0.01070 | |
| Alpha - BHC | | 0.05000 | | 0.00800 |
| Beta - BHC | | 0.05000 | | 0.00800 |
| Gamma - BHC | 0.02220 | | 0.04390 | |
| Delta - BHC | | 0.05000 | | 0.00800 |
| Chlordane | 0.02650 | | 0.02760 | |
| 4,4'-DDD | 0.00785 | | 0.01740 | |
| 4,4'-DDE | 0.01390 | | 0.01430 | |
| 4,4'-DDT | 0.02150 | | 0.01700 | |
| Dieldrin | 0.00261 | | 0.00637 | |
| Endosulfan I | | 0.05000 | | 0.00800 |
| Endosulfan II | | 0.10000 | | 0.01600 |
| Endosulfan Sulfate | | 0.10000 | | 0.01600 |
| Endrin | | 0.10000 | | 0.01600 |
| Endrin aldehyde | | 0.10000 | | 0.01600 |
| Heptachlor | 0.01300 | | 0.01300 | |
| Heptachlor epoxide | 0.06500 | | 0.09440 | |
| Toxaphene | | 1.00000 | | 0.1600 |
| PCB-1016 | 0.14000 | | 0.06290 | |
| PCB-1221 | | 0.50000 | | 0.0800 |
| PCB-1232 | | 0.50000 | | 0.08000 |
| PCB-1242 | | 0.50000 | | 0.08000 |
| PCB-1248 | | 0.50000 | | 0.08000 |
| PCB-1254 | | 1.00000 | | 0.16000 |
| PCB-1260 | 0.07420 | | 0.04860 | |

TABLE 5-2 GROUND-WATER QUALITY REGULATORY CRITERIA

| Parameters | Safe Drinking Water Act (ug/L) | | |
|-------------------------------|--------------------------------|------|--------|
| | MCL | SMCL | MCLG |
| <u>Volatile organics</u> | | | |
| Vinyl chloride | 2 | - | 0 |
| trans-1,2-Dichloroethylene | 100* | - | 100* |
| 1,2-Dichloroethane | 5 | - | 0 |
| 1,1,1-Trichloroethane | 200 | - | 200 |
| 1,2-Dichloropropane | 5* | - | 0* |
| Trichloroethylene | 5 | - | 0 |
| Tetrachloroethene | 5.0* | - | 0* |
| 1,4-Dichlorobenzene | 75 | 5* | 75 |
| Bromoform | 100 ^(a) | - | - |
| Chlorodibromomethane | 100 ^(a) | - | - |
| Chloroform | 100 ^(a) | - | - |
| Dichlorobromomethane | 100 ^(a) | - | - |
| Carbon Tetrachloride | 5 | - | 0 |
| 1,1-Dichloroethylene | 7 | - | 7 |
| Benzene | 5 | - | 0 |
| Toluene | 2,000* | 40* | 2,000* |
| Ethylbenzene | 700* | 30* | 700* |
| 1,3-Dichlorobenzene | 600* | 10* | 600* |
| <u>Semi-volatile Organics</u> | | | |
| Pentachlorophenol | 200* | 30* | 200* |

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

SMCL = Secondary Maximum Contaminant Level

(a) Value is for individual chemicals or for combination of these chemicals.

(b) The silver MCL is proposed to be deleted.

* = Proposed

Sources: Federal Register, Vol. 54, No. 97, Monday, May 22, 1989.
p.22160 and 22064-5.

Federal Register, Vol. 53, No. 160, Thurs., August 18, 1988,
p. 31518, 31530

Federal Register, Vol. 52, No. 130, Weds., July 8, 1987,
p. 25694.

TABLE 5-2 (Cont.)

| Parameters | Safe Drinking Water Act | | | |
|-------------------|-------------------------|-------------------|-------|------|
| | MCL | | SMLC | MCLG |
| | Current | Proposed | | |
| <u>Inorganics</u> | | | | |
| Arsenic | 50 | - | - | - |
| Beryllium | - | - | - | - |
| Cadmium | 10 | 5 | - | 5* |
| Chromium (total) | 50 | 100 | - | 100* |
| Copper | - | - | 1000 | - |
| Lead | 50 | 5 | - | 0* |
| Mercury | - | 2 | - | 2* |
| Nickel | - | - | - | - |
| Selenium | 10 | 50 | - | 50* |
| Silver | - | 50 ^(b) | 90* | - |
| Thallium | - | - | - | - |
| Zinc | - | - | 5,000 | - |

A surface water sample (SW-1) and stream sediment sample (SS-1) were collected from a stream located near the southeastern corner of the site. This sample was collected downstream of an outfall for the site wastewater treatment system.

Four soil samples were obtained from 1 to 3 ft below grade to assess potential soil contamination. SS-2 was collected south of the acid storage shed, SS-3 was collected near the acid refueling platform, SS-4 was collected near a stormwater drainage pipe outfall, and SS-5 was collected at the sewage disposal filter bed outfall.

5.1.2 Site Characterization

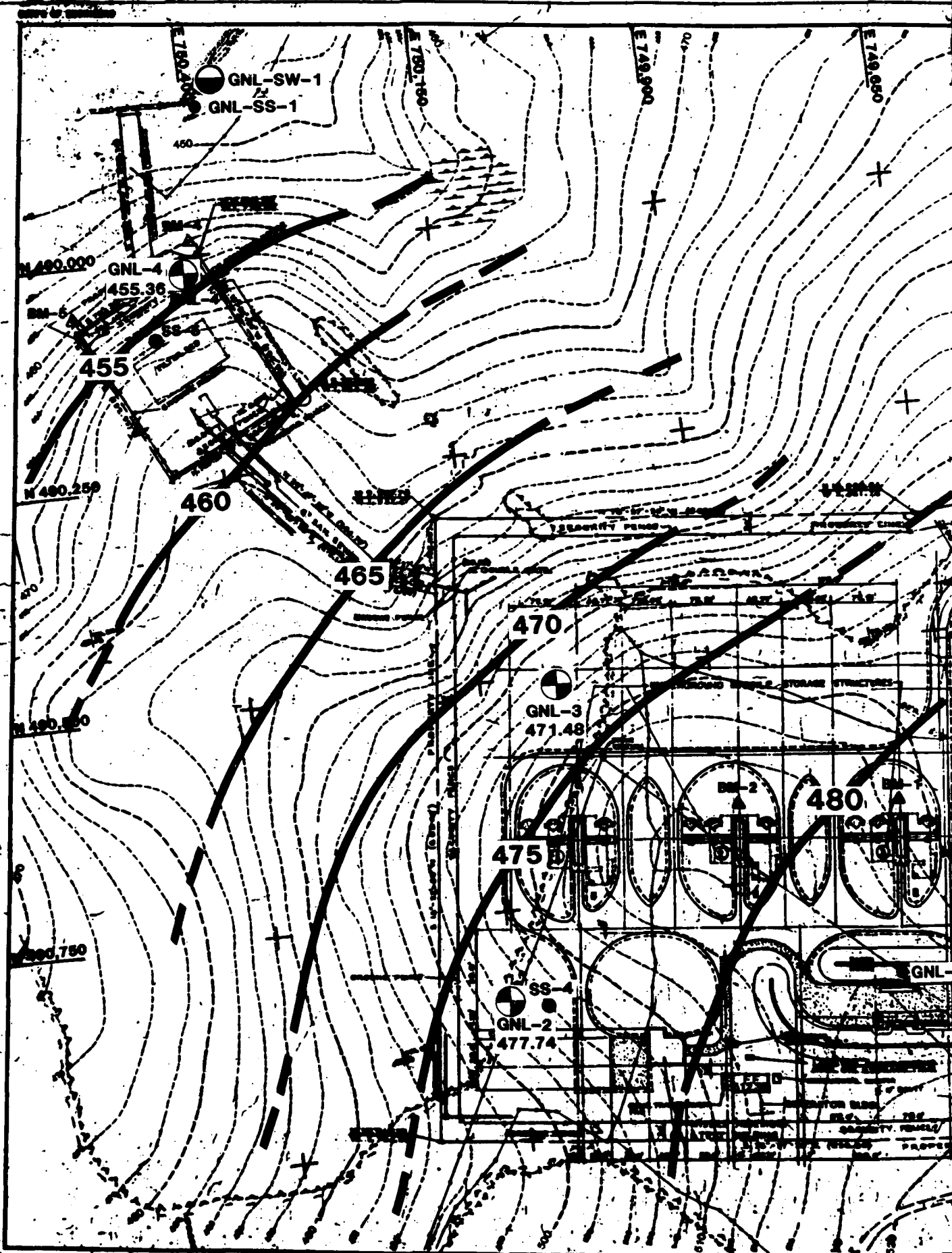
The Launch area is located approximately 1.5 mi north of the Control area. Surrounding land use consists of a mixture of single-family residences and farm land. An active U.S. Army Reserve Headquarters office occupies the front portion of the Launch area.

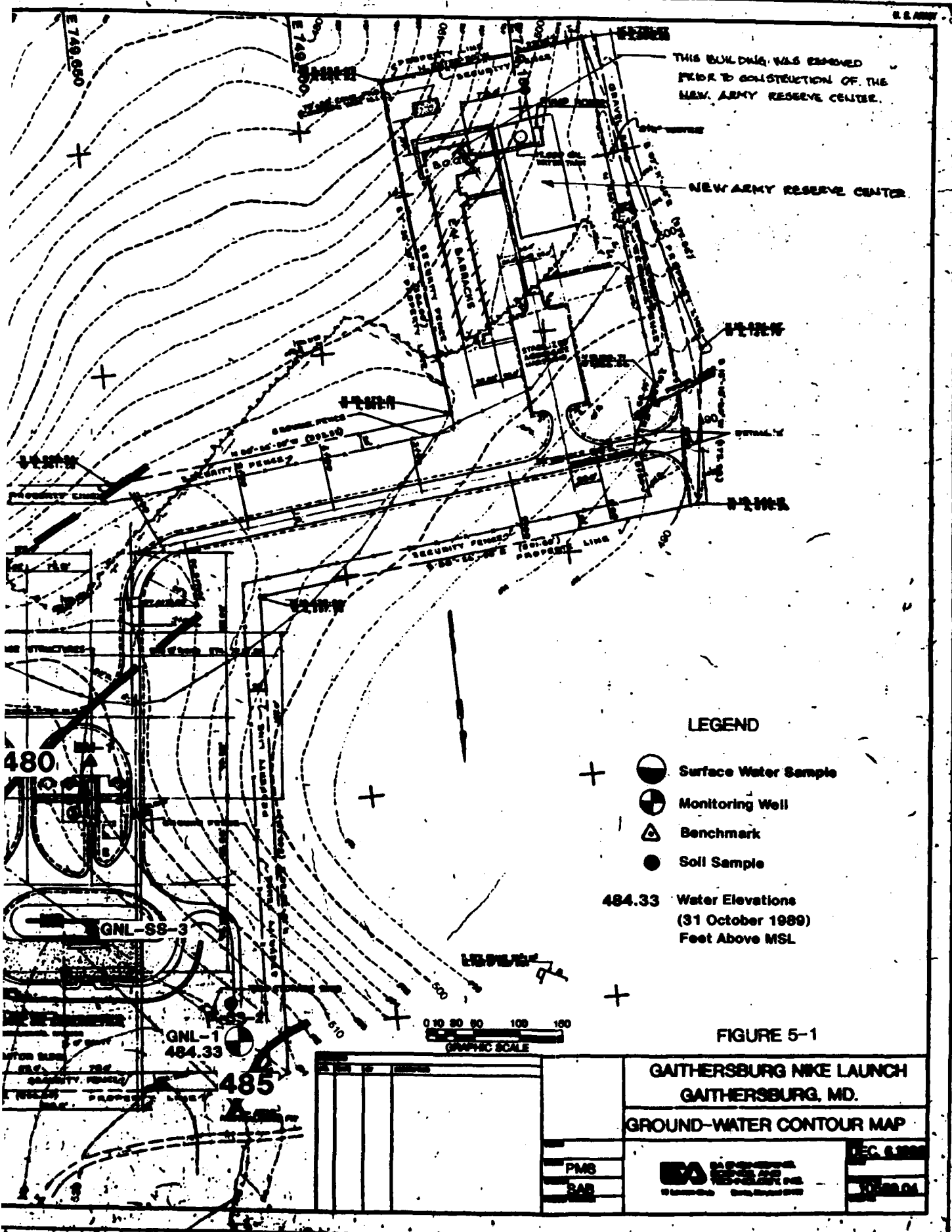
Important site features associated with past Army operations include three missile storage structures, acid refueling area, missile assembly and test building, generator building, acid storage shed, and wastewater disposal area. The locations of these features are shown on Figure 1-2. Four borings were drilled at this site and completed as monitoring wells. The soil samples collected from these borings indicate that the subsurface material consists primarily of clayey silt and fine sand (saprolite). All monitoring wells were screened in the saprolite. Depth to water measurements and water elevations obtained between 14 April 1989 and 19 December 1989 for the four onsite monitoring wells are shown on Table 5-3. A ground-water contour map was constructed for the site using static water-level measurements obtained on 31 October 1989 (Figure 5-1). Ground-water flow direction trends to the southeast towards a small southwesterly flowing surface stream.

TABLE 5-3 WATER LEVEL ELEVATIONS IN MONITORING WELLS AT THE GAITHERSBURG NIKE LAUNCH AREA

| Well No. | Reference Elevation (ft above MSL) | Depth to Water (ft) | | | | | Water Elevation (ft. above MSL) | | | | |
|----------|---|---------------------|----------------|---------------|----------------|----------------|---------------------------------|----------------|---------------|----------------|----------------|
| | | 14 APR 1989 | 25 MAY 1989 | 2 JUN 1989 | 29 SEP 1989 | 31 OCT 1989 | 7 NOV 1989 | 31 NOV 1989 | 7 DEC 1989 | 19 DEC 1989 | 19 DEC 1989 |
| GWL-1 | 518.49 | 33.82 | 31.50 | 31.17 | 33.60 | 34.16 | 34.20 | 32.94 | 34.43 | 484.67 | 486.99 |
| | | | | | | | | | | 487.32 | 484.89 |
| | | | | | | | | | | 484.33 | 484.29 |
| | | | | | | | | | | 485.55 | 484.06 |
| GWL-2 | 505.91 | 25.95 | 23.05 | 23.10 | 28.07 | 28.17 | 28.21 | 28.00 | 28.29 | 479.96 | 482.86 |
| | | | | | | | | | | 482.81 | 477.84 |
| | | | | | | | | | | 477.74 | 477.91 |
| | | | | | | | | | | 477.62 | 477.62 |
| GWL-3 | 506.52 | 33.92 | 31.73 | 31.55 | 35.15 | 35.04 | 35.20 | 35.15 | 35.59 | 472.60 | 474.79 |
| | | | | | | | | | | 474.97 | 471.37 |
| | | | | | | | | | | 471.48 | 471.32 |
| | | | | | | | | | | 471.37 | 471.37 |
| | | | | | | | | | | 470.93 | 470.93 |
| GWL-4 | 467.22 | -- | 8.55 | 9.03 | 12.96 | 11.86 | 11.84 | 11.33 | 11.60 | -- | 458.67 |
| | | | | | | | | | | 458.19 | 454.26 |
| | | | | | | | | | | 455.36 | 455.89 |
| | | | | | | | | | | 455.62 | 455.62 |

Note: Reference elevation = top of PVC casing.





Slug tests were performed in monitoring wells GNL-3 and GNL-4 in order to estimate hydraulic properties of the water table (saprolite) aquifer (Section 4.5 Aquifer Tests). Permeability values calculated from slug test data ranged from 5.17×10^{-4} ft/min to 1.59×10^{-3} ft/min (Table 5-4). These permeability values are typical for fine sand and mixtures of sand, silt, and clayey material.

Table 5-5 is a partial record of water supply wells within a 1.5 mi radius of the Launch area. Figure 5-2 shows the approximate location of the wells listed in Table 5-5. Small residential communities surrounding the Launch area account for the majority of domestic wells. All domestic wells utilize the Wissahickon and associated saprolite aquifer.

5.1.3 Storage Structure Investigation

On 25 May 1989, EA staff accessed the three missile storage structures located at the Launch Area. The structures were entered by EA personnel utilizing hand-held instrumentation to detect organic vapors, explosive fumes, and oxygen level. No elevated organic vapors or explosive fume levels were detected, and oxygen levels in the structures did not differ from atmospheric levels. The main entrance of storage structure #2 was blocked with debris consisting mainly of furniture and garbage.

The missile storage structures are approximately 59 ft wide, 62 ft long, and 17 ft high. The hydraulic lift platform and associated pumps and motors were still in place at all storage facilities. Aluminum cans, glass bottles, wood debris, and furniture were scattered throughout the storage area. A red oily film was observed near the hydraulic lift pumps. A small amount of standing water was noted below the missile lift platform.

The control room cabinet is approximately 19 ft wide, 20 ft long, and 17 ft high. The walls are lined with sound insulation and are paneled.

TABLE 5-4 PERMEABILITY VALUES DERIVED FROM SLUG TESTS CONDUCTED IN
GAITHERSBURG NIKE LAUNCH MONITORING WELLS

| <u>Well</u> | <u>ft/min</u> | <u>ft/sec</u> | <u>cm/sec</u> | <u>gpd/ft²</u> |
|-------------------|-----------------------|-----------------------|-----------------------|---------------------------|
| GNL-3 (TEST 1) | 5.17×10^{-4} | 8.62×10^{-6} | 2.63×10^{-4} | 5.57 |
| GNL-3 (TEST 2) | 6.84×10^{-4} | 1.14×10^{-5} | 3.48×10^{-4} | 7.37 |
| GNL-4 (TEST 1) | 1.59×10^{-3} | 2.65×10^{-5} | 8.06×10^{-4} | 17.1 |
| GNL-4 (TEST 2) | 1.49×10^{-3} | 2.48×10^{-5} | 7.55×10^{-4} | 16.0 |

TABLE 5-5 PARTIAL RECORD OF WATER SUPPLY WELLS WITHIN A 1.5 MILE RADIUS OF THE GAITHERSBURG NIKE LAUNCH AREA

| State Permit No. | Owner | Approximate Location | Date Completed | Depth of Well (ft) | Casing Depth (ft) | Screen Depth (ft) |
|---------------------|-----------------------|--------------------------------|-------------------|-----------------------------|-------------------------|-------------------------|
| MO-73-1350 | James B. Gross | Lockhaven Dr., Laytonsville | 4/77 | 70 | 50 | 50-70 |
| MO-73-0248 | Joseph Dobson | Emory Grove, Gaithersburg | 3/73 | 350 | 46 | |
| MO-73-3655 | Wilbur R. Hines | Strawberry Knoll, Gaithersburg | 5/83 | 145 | 81 | |
| MO-81-1736 | Vernon Murphy | Brethren Dr., Gaithersburg | -- | -- | -- | |
| MO-72-0225 | Fairfield Const. Co. | Exodus Dr., Laytonsville | 9/72 | 90 | 40 | 40-90 |
| MO-73-0890 | Pettit & Griffin Inc. | Faircroft Ct., Laytonsville | 12/75 | 200 | 72 | |
| MO-73-1061 | Richard J. Latz | Lochaven Ct., Goshen | 7/76 | 90 | 67 | 67-90 |
| MO-73-1352 | James Zeck | Plum Ck. Ct., Laytonsville | 4/77 | 130 | 51 | |
| MO-81-1338 | Glenn Brake, Jr. | Plum Ck. Dr., Goshen | -- | -- | -- | |
| MO-81-0538 | William E. Norman | Goshen Ct., Goshen | 8/83 | 150 | 65 | |
| MO-81-1954 | Morsab Inc. | Pompano Te., Laytonsville | 10/86 | 140 | 100 | |
| MO-81-0921 | Larry Orth | Warfield Rd., Gaithersburg | -- | -- | -- | |
| MO-81-0922 | Larry Orth | Warfield Rd., Gaithersburg | -- | -- | -- | |
| MO-81-1194 | John McEleney | Warfield Rd., Gaithersburg | 7/85 | 285 | 62 | |
| MO-81-2088 | Ralph Mollet | Warfield Rd., Gaithersburg | 12/86 | 180 | 48 | |
| MO-73-0037 | Pulte Home Corp. | Brethern Rd., Goshen | 9/72 | 115 | 60 | |
| MO-73-0039 | Pulte Home Corp. | Goshen Rd., Goshen | 9/72 | 140 | 60 | |
| MO-73-0242 | Calvin Burton | Warfield Rd., Goshen | 7/73 | 120 | 60 | |
| MO-73-1919 | Ward V. Buzzell | Warfield Rd., Goshen | 5/78 | 90 | 57 | 57-90 |
| MO-81-0730 | Kettler Bros. Inc. | Snouffer School Rd., Goshen | -- | -- | -- | |
| MO-73-2151 | Glen Kospenick Jr. | Warfield Rd., Goshen | 6/78 | 160 | 46 | |
| MO-73-3298 | Barbara Massengill | Warfield Rd., Goshen | 7/81 | 240 | 31 | |

TABLE 5-5 EXTENDED

| State Permit No. | Owner | (Before Test) Static Water Level Below Surface (ft) | (After Test) Water Level When Pumping (ft) | (Test) Pumping Rate (gpm) | Aquifer | Water Use |
|---------------------|-----------------------|--|--|---------------------------------|-------------|--------------|
| MO-73-1350 | James B. Gross | 36 | 61 | 12 | Wissahickon | D |
| MO-73-0248 | Joseph Dobson | 40 | 350 | 10 | Wissahickon | D |
| MO-73-3655 | Wilbur R. Hines | 30 | 53 | 8 | Wissahickon | D |
| MO-81-1736 | Vernon Murphy | -- | -- | -- | Wissahickon | D |
| MO-72-0225 | Fairfield Const. Co. | 48 | 81 | 5 | Wissahickon | D |
| MO-73-0890 | Pettit & Griffin Inc. | 45 | 200 | 4 | Wissahickon | D |
| MO-73-1061 | Richard J. Larz | 57 | 76 | 8 | Wissahickon | D |
| MO-73-1352 | James Zeck | 37 | 109 | 5 | Wissahickon | D |
| MO-81-1338 | Glenn Brake, Jr. | -- | -- | -- | Wissahickon | D |
| MO-81-0538 | William E. Norman | 20 | 80 | 8 | Wissahickon | D |
| MO-81-1954 | Norsab Inc. | 36 | 46 | 10 | Wissahickon | D |
| MO-81-0921 | Larry Orth | -- | -- | -- | Wissahickon | D |
| MO-81-0922 | Larry Orth | -- | -- | -- | Wissahickon | D |
| MO-81-1194 | John McEleney | 32 | 180 | 4 | Wissahickon | D |
| MO-81-2088 | Ralph Mollet | 35 | 45 | 10 | Wissahickon | D |
| MO-73-0037 | Pulte Home Corp. | 34 | 96 | 10 | Wissahickon | D |
| MO-73-0039 | Pulte Home Corp. | 43 | 121 | 8 | Wissahickon | D |
| MO-73-0242 | Calvin Burton | 40 | 120 | 15 | Wissahickon | D |
| MO-73-1919 | Ward V. Buzzell | 37 | 61 | 6 | Wissahickon | D |
| MO-81-0730 | Kettler Bros. Inc. | -- | -- | -- | Wissahickon | F |
| MO-73-2151 | Glen Koepenick Jr. | 40 | 160 | 4 | Wissahickon | D |
| MO-73-3298 | Barbara Massengill | 30 | 240 | 20 | Wissahickon | D |

D = Domestic

F = Farming

Much of the paneling has been ripped out and scattered about the floor. Insulation is exposed and may contain asbestos.

5.1.4 Data Assessment

5.1.4.1 Ground Water And Surface Water

Analytical results for ground water and surface water samples collected at the Launch site are summarized in Table 5-6 and presented in Appendix D. No volatile compounds were detected in the samples above the CRLs. The semivolatile compounds detected were Bis(2-Ethylhexyl) phthalate in GNL-4 at a concentration of 115.0 µg/L and Di-n-octyl phthalate in the surface water sample (SW-1) at a concentration of 43.9 µg/L. There are no regulatory criteria available to evaluate the two phthalate compounds that were detected in GNL-4 and GNL SW-1. Phthalates are a common component of plastics and detection of these compounds probably is attributable to field or laboratory contamination. A pesticide compound, heptachlor, was detected in all water samples including the field and method blank samples ranging in concentration from 0.080 µg/L (SW-1) to 0.107 µg/L (GNL-3 and 4). The detection of low levels of heptachlor, a pesticide, in the method blank sample indicates that the detection of this compound can be attributed to laboratory contamination.

A review of the dissolved metals data indicates that none of the detected levels exceed the current MCL criteria. However, the cadmium levels in all samples including the field blank exceed the proposed MCL and MCLG of 5 µg/L. The detection of cadmium in the field blank and not the method blank raises the question of data validity and may be attributed to field contamination. The lead level (35 µg/L) for the GNL-3 ground-water sample is below the current MCL of 50 µg/L, but exceeds the proposed MCL of 5 µg/L and proposed MCLG of 0 µg/L. If the current MCL for lead is lowered to the proposed values in the future, the lead level in GNL-3 will be excessive and additional work to further document the problem should be considered.

TABLE 5-6 SUMMARY OF ANALYTICAL RESULTS (µg/L) FOR GROUND WATER AND SURFACE WATER SAMPLES COLLECTED AT THE GAITHERSBURG NIKE LAUNCH SITE

| | Trip Blank | Field Blank | Method Blank | Monitoring Well Number | | | | Surface Water GNL-SW-1 |
|----------------------------|---------------|----------------|-----------------|------------------------|-------|-------|-------|---------------------------|
| | | | | GNL-1 | GNL-2 | GNL-3 | GNL-4 | |
| VOLATILE ORGANICS | <CRL | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| SEMIVOLATILES | NA | | 9.3 | <CRL | <CRL | <CRL | 115.0 | <CRL |
| bis(2-Ethylhexyl)phthalate | | <CRL | | <CRL | <CRL | <CRL | <CRL | 43.9 |
| Di-n-octyl phthalate | | <CRL | | | | | | |
| PESTICIDES/PCBs | NA | 0.08 | | 0.104 | 0.100 | 0.107 | 0.107 | 0.087 |
| Heptachlor | | | | | | | | |
| DISSOLVED METALS | NA | | | 2.88 | <CRL | <CRL | <CRL | <CRL |
| Antimony | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Arsenic | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Beryllium | | 6.01 | | 7.4 | 7.83 | 8.48 | 7.73 | 6.65 |
| Cadmium | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Chromium (total) | | <CRL | | 17.7 | 10.4 | 14.4 | 14.4 | 9.60 |
| Copper | | <CRL | | 4.57 | <CRL | 35.0 | <CRL | <CRL |
| Lead | | 0.1 | | 0.15 | 0.11 | 0.12 | 0.10 | 0.10 |
| Mercury | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Nickel | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Selenium | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Silver | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Thallium | | <CRL | | 39.3 | 42.6 | 62.6 | 23.5 | 14.5 |
| Zinc | | 7.42 | | | | | | |
| NON-METALS | NA | | | | | | | |
| Cyanide (total) | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |
| Phenols (total) | | <CRL | | <CRL | <CRL | <CRL | <CRL | <CRL |

(1) Preliminary Data
CRL = Certified Reporting Limit
ND = Not Detected
NA = Not Analyzed

All samples were also analyzed for PCB total phenols and cyanide and results indicate that none of these constituents were detected.

5.1.3.2 Soil

Analytical results for soil samples are summarized in Table 5-7 and presented in Appendix D. No volatile or semivolatile organic compounds were detected in the samples above the CRLs. Detected metals include Arsenic (SS-4), Beryllium (SS-1, 2, 3, 4, 5), total Chromium (SS-1, 2, 4, 5), Copper (SS-1, 2, 3, 4, 5), Mercury (SS-2, 4, 5), Nickel (SS-1, 2, 3, 4, 5) and Zinc (SS-1, 2, 3, 4, 5). Observed levels are well within the expected background ranges for soils typical of the site.

5.2 FORMER NIKE CONTROL AREA SITE

5.2.1 Field Sampling Plan

In order to evaluate the nature of contamination as a result of past activities at the site, four monitoring wells were installed and sampled and three soil samples were collected for chemical analysis. The upgradient well (GNC-5) is located along the eastern boundary of the site. Wells GNC-6, GNC-7, and GNC-8 are located downgradient of potential contaminant sources (Figure 1-3). GNC-6 was installed downgradient of the engine generator and frequency changer building, dry well, and 6,000-gal gasoline UST. Wells GNC-7 and GNC-8 were placed downgradient of the wastewater disposal area and the 2,000-gal fuel oil UST, respectively.

Two surficial soil samples were obtained for chemical analysis from 1 to 3 ft below grade, near potential source areas of onsite contamination. Soil sample SS-1 was collected in a grassy surface drainage swale downgradient of the gasoline UST, engine generator and frequency changer building, and dry well. SS-2 was collected near the waste disposal

TABLE 5-7 SUMMARY OF ANALYTICAL RESULTS ($\mu\text{g/g}$) FOR SOIL SAMPLES
COLLECTED AT THE GAITHERSBURG NIKE LAUNCH SITE

| | <u>SS-1</u> | <u>SS-2</u> | <u>SS-3</u> | <u>SS-4</u> | <u>SS-5</u> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| VOLATILE ORGANICS | <CRL | <CRL | <CRL | <CRL | <CRL |
| SEMIVOLATILES | <CRL | <CRL | <CRL | <CRL | <CRL |
| PESTICIDES/PCBs | <CRL | <CRL | <CRL | <CRL | <CRL |
| DISSOLVED METALS | | | | | |
| Antimony | <CRL | <CRL | <CRL | <CRL | <CRL |
| Arsenic | <CRL | <CRL | <CRL | 2.71 | <CRL |
| Beryllium | 0.487 | 0.792 | 0.670 | 1.040 | 0.823 |
| Cadmium | <CRL | <CRL | <CRL | <CRL | <CRL |
| Chromium (total) | 10.90 | 12.90 | <CRL | 20.00 | 27.30 |
| Copper | 10.20 | 32.00 | 18.20 | 35.10 | 81.00 |
| Lead | <CRL | <CRL | <CRL | <CRL | <CRL |
| Mercury | <CRL | 0.027 | <CRL | 0.018 | 0.033 |
| Nickel | 9.14 | 8.59 | 4.76 | 8.45 | 21.40 |
| Selenium | <CRL | <CRL | <CRL | <CRL | <CRL |
| Silver | <CRL | <CRL | <CRL | <CRL | <CRL |
| Thallium | <CRL | <CRL | <CRL | <CRL | <CRL |
| Zinc | 27.90 | 37.30 | 28.20 | 34.80 | 89.80 |
| NON-METALS | | | | | |
| Cyanide (total) | <CRL | <CRL | <CRL | <CRL | <CRL |
| Phenols (total) | <CRL | <CRL | <CRL | <CRL | <CRL |

CRL = Certified Reporting Limit

filter bed area. SS-3 was collected from the boring for monitoring well GNL-6 at a depth of 30 ft, which roughly corresponds to the water-table surface.

5.2.2 Site Characterization

The Control area was formerly utilized as the Army Reserve Center in Gaithersburg, Maryland, and is not being used in any capacity at the present time. This site has been identified for closure in the Base Realignment and Closures Report prepared by the Defense Secretary's Commission in December 1988. It is located adjacent to several residential communities. The existing buildings onsite include the former mess hall, administration, barracks, and engine generator and frequency changer buildings. Other important site features include a dry well located northeast of the engine generator and frequency changer building and the wastewater disposal area. The components of the disposal area include the septic tank and siphon chamber, filter bed, and chlorinator house. The locations of these features are shown on Figure 1-3. Four USTs, one gasoline and three fuel oil, were also located onsite. All of these USTs were removed during the course of this PA/SI. Four borings were drilled at the site and completed as monitoring wells. Soil samples collected from the boring indicate that the site is underlain by a sequence of clayey silt and fine sand (saprolite). All monitoring wells at the site are screened in this material except GNC-8, which is partially screened within competent bedrock. Depth to water and water elevations obtained between 14 April 1989 to 19 December 1989 for the four onsite monitoring wells are shown in Table 5-8. A water table contour map was constructed for the site using static water-level measurements obtained on 31 October 1989 (Figure 5-3). Ground-water flow direction generally trends to the west.

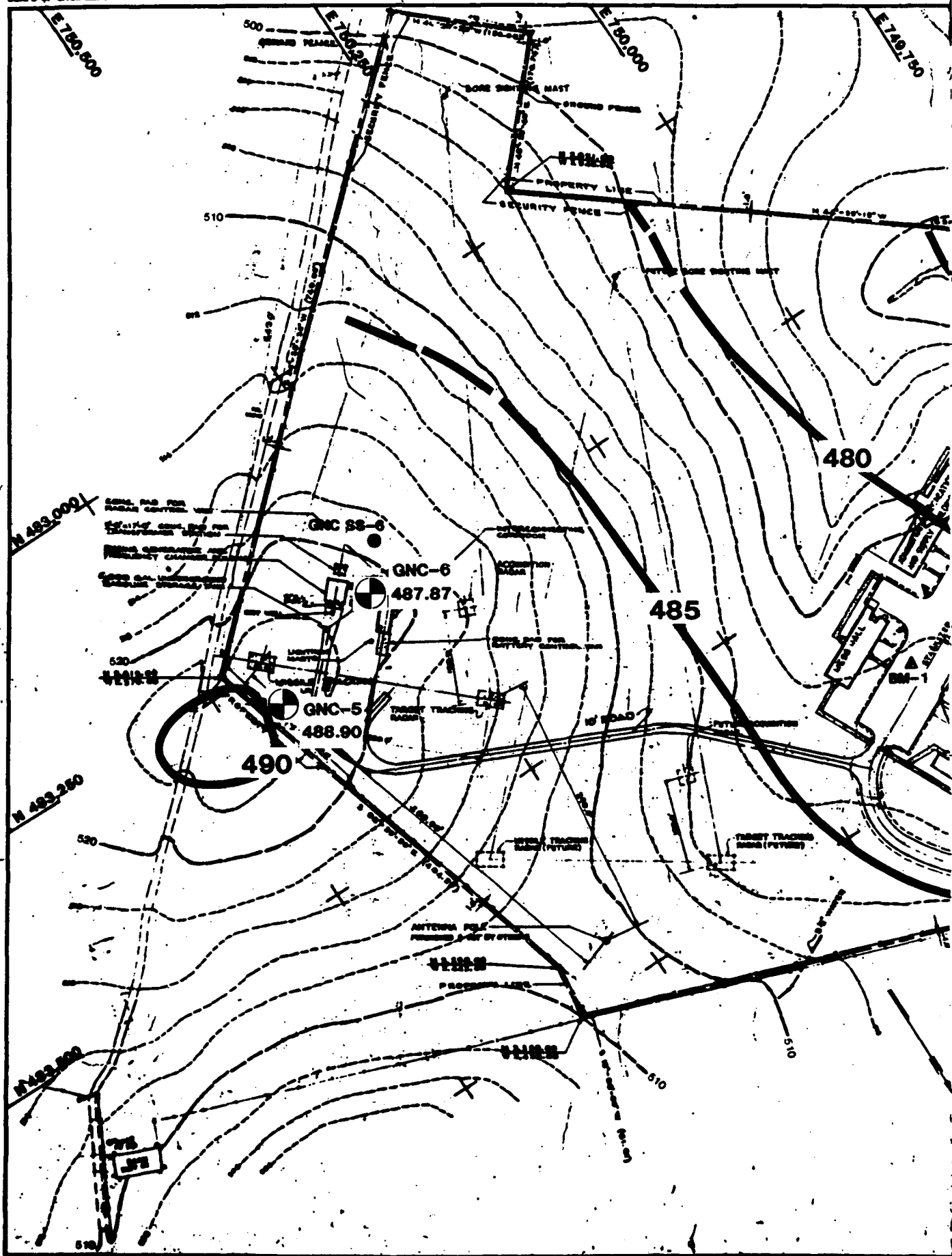
Slug tests were performed on monitoring wells GNC-6 and GNC-8 in order to estimate the permeability of the water table (saprolite) aquifer (Section 4.5, Aquifer Tests). Calculated permeability values ranged from 6.30×10^{-4} ft/min to 2.13×10^{-3} ft/min (Table 5-9). The permeability values

TABLE 5-8 WATER LEVEL ELEVATIONS IN MONITORING WELLS AT THE GAITHERSBURG NIKI CONTROL SITE

| Well No. | Reference Elevation (ft above MSL) | Depth to Water (ft) | | | | | | Water Elevation (ft. above MSL) | | | | | | | | | |
|----------|---|---------------------|------------|------------|------------|-----------|------------|---------------------------------|------------|------------|------------|-----------|------------|------------|-------------|--------|--------|
| | | 14 1989 | 25 1989 | 29 1989 | 31 1989 | 7 1989 | 31 1989 | 14 1989 | 25 1989 | 29 1989 | 31 1989 | 7 1989 | 31 1989 | 19 1989 | DEC 1989 | | |
| GMC-5 | 524.68 | 36.84 | -- | 35.05 | 35.01 | 35.78 | 35.93 | 36.24 | 36.48 | 487.84 | -- | 489.63 | 489.67 | 488.90 | 488.75 | 488.44 | 488.20 |
| GMC-6 | 522.19 | -- | -- | 33.41 | 33.46 | 34.32 | 34.47 | 34.76 | 35.00 | -- | -- | 488.78 | 488.73 | 487.87 | 487.72 | 487.43 | 487.19 |
| GMC-7 | 488.70 | 14.17 | 13.50 | 13.96 | 15.65 | 14.98 | 15.10 | 15.01 | 15.42 | 474.53 | 475.20 | 474.74 | 473.05 | 473.72 | 473.60 | 473.69 | 473.28 |
| GMC-8 | 503.84 | 19.20 | 17.48 | 17.16 | 19.58 | 19.97 | 20.04 | 20.13 | 20.44 | 484.64 | 486.36 | 486.68 | 484.26 | 483.87 | 483.80 | 483.71 | 483.40 |

Note: Reference elevation = top of PVC casing.

CONTOUR OF ELEVATION



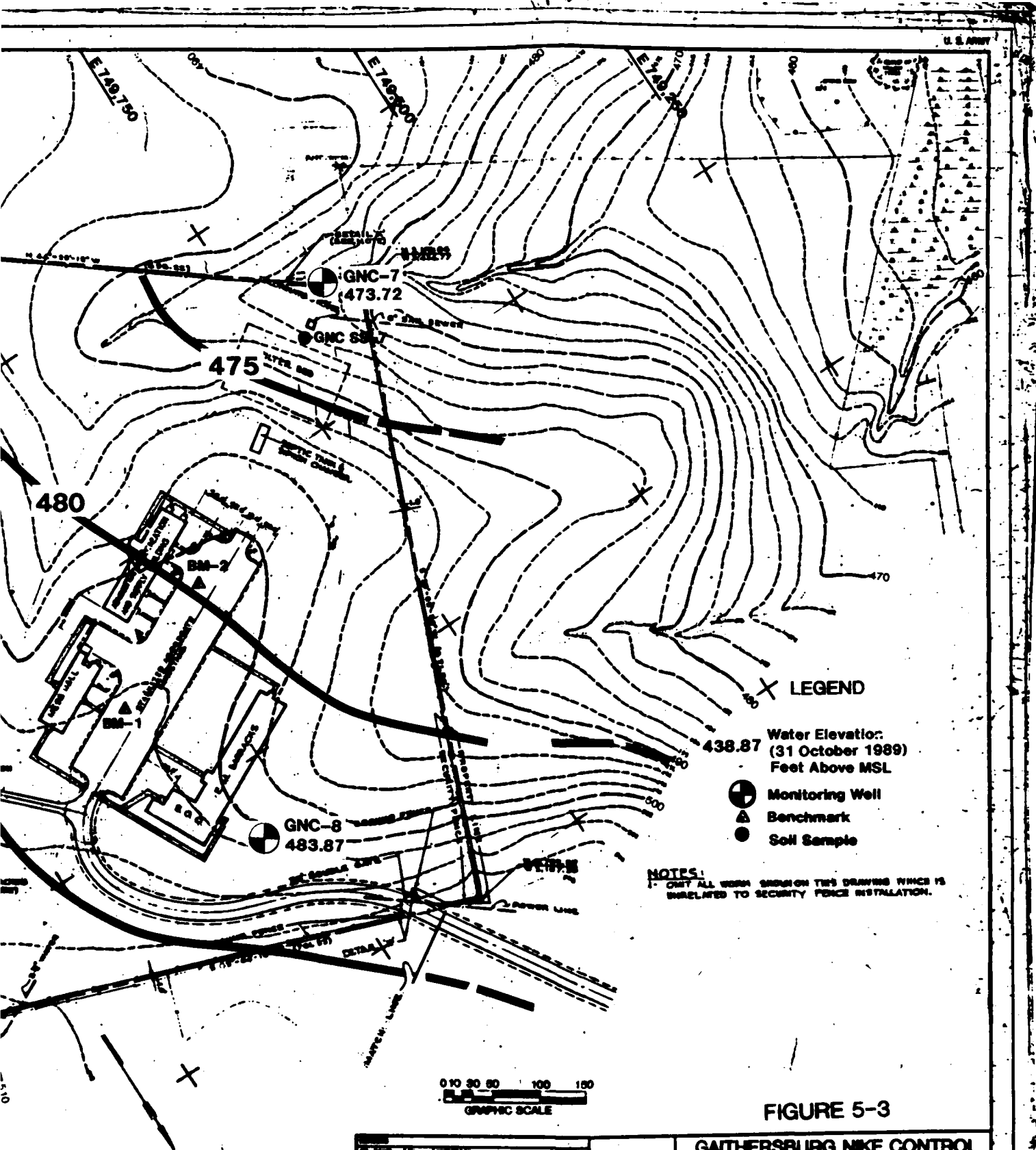


FIGURE 5-3

| | | |
|--|--|-----------------|
| GAITHERSBURG NIKE CONTROL GAITHERSBURG, MD. | | |
| GROUND-WATER CONTOUR MAP | | |
| <div style="display: flex; justify-content: space-between;"> <div> <p>FMS</p> <p>SAB</p> </div> <div> <p>DEC 61989</p> <p>10559.04</p> </div> </div> | | <p>10559.04</p> |

TABLE 5-9 PERMEABILITY VALUES DERIVED FROM SLUG TESTS CONDUCTED IN
GAITHERSBURG NIKE CONTROL AREA MONITORING WELLS

| <u>Well</u> | <u>ft/min</u> | <u>ft/sec</u> | <u>cm/sec</u> | <u>gpd/ft²</u> |
|-------------------|-----------------------|-----------------------|-----------------------|---------------------------|
| GNC-6 (TEST 1) | 1.98×10^{-3} | 3.29×10^{-5} | 1.00×10^{-3} | 21.3 |
| GNC-6 (TEST 2) | 2.13×10^{-3} | 3.56×10^{-5} | 1.08×10^{-3} | 23.0 |
| GNC-8 (TEST 1) | 6.30×10^{-4} | 1.05×10^{-5} | 3.20×10^{-4} | 6.79 |
| GNC-8 (TEST 2) | 9.20×10^{-4} | 1.53×10^{-5} | 4.67×10^{-4} | 9.91 |

are typical for aquifers composed of fine sand and mixtures of sand, silt, and clay.

Table 5-10 is a partial record of water supply wells within a 1-mi radius of the Control area. Figure 5-4 shows the approximate location of the wells listed in Table 5-10. Nearby residential communities account for the majority of domestic wells. All wells utilize the Wissahickon and associated saprolite aquifer.

5.2.3 Data Assessment

5.2.3.1 Ground Water

The analytical results from ground-water samples collected at the Control site are summarized in Table 5-11 and presented in Appendix D. No volatile organic, pesticide/PCB, total phenols or cyanide compounds were detected above the CRLs. Di-n-octyl phthalate, a semivolatile organic compound, was detected in monitoring wells GNC-6, 7 and 8 at concentrations ranging between 23.7 µg/L to 36.8 µg/L. As stated in Section 5.1.4.1, there are no regulatory criteria for the phthalates and these compounds are a common component of plastics. The levels detected probably are attributable to field and/or laboratory contamination. Dissolved metals detected in the samples at levels above the CRLs include Antimony (GNC-7 and 8), Cadmium (GNC-5, 6, 7, and field blank), Copper (GNC-8), Nickel (GNC-7), and Zinc (GNC-5, 6, 7, 8). The cadmium levels in GNC-5, 6, 7 and the field blank range from 5.6 to 8.15 µg/L. These cadmium levels do not exceed the current MCL but slightly exceed the proposed MCL and MCLG of 5 µg/L; however, the detection of cadmium in the field blank suggests that these cadmium levels could be attributed to field contamination.

Potable water supply samples were obtained from raw and treated water points at the control area of the Gaithersburg ARC in December 1983 by USAEHA. These samples were analyzed for volatile organic compounds, metals, and the inorganic parameters. The only potential problem noted

TABLE 5-10 PARTIAL RECORD OF WATER WELLS WITHIN A 1-MILE RADIUS OF THE GAITHERSBURG NIXE CONTROL SITE

| State Permit No. | Owner | Approximate Location | Date Completed | Depth of Well (ft) | Casing Depth (ft) | Screen Depth (ft) |
|---------------------|-----------------------|--------------------------------|-------------------|-----------------------------|-------------------------|-------------------------|
| MO-73-0248 | Joseph Dobson | Emory Grove Rd., Gaithersburg | 3/73 | 350 | 46 | |
| MO-81-0604 | Pettit & Griffin Inc. | Emory Grove Rd., Gaithersburg | 10/83 | 200 | 29 | |
| MO-81-1278 | John A. Canterbury | Emory Grove Rd., Gaithersburg | 9/85 | 90 | 75 | 75-90 |
| MO-73-3655 | Wilbur R. Hines | Strawberry Knoll, Gaithersburg | 5/83 | 145 | 81 | |
| MO-81-1328 | William T. Duvall | Emory Grove Rd., Gaithersburg | 10/85 | 90 | 72 | |
| MO-73-3144 | Larry Sanders | Emory Grove Rd., Emory Grove | 6/81 | 200 | 89 | |

TABLE 5-10 EXTENDED

| State Permit No. | Owner | (Before Test) Static Water Level Below Surface (ft) | (After Test) Water Level When Pumping (ft) | (Test) Pumping Rate (gpm) | Aquifer | Water Use |
|---------------------|-----------------------|--|--|---------------------------------|-------------|--------------|
| MO-73-0248 | Joseph Dobson | 40 | 350 | 10 | Wissahickon | D |
| MO-81-0604 | Pettit & Griffin Inc. | 19 | 126 | 4 | Wissahickon | D |
| MO-81-1278 | John A. Canterbury | 35 | 80 | 50 | Wissahickon | D |
| MO-73-3655 | Wilbur R. Hines | 30 | 58 | 8 | Wissahickon | D |
| MO-81-1328 | William T. Duvall | 30 | 88 | 20 | Wissahickon | D |
| MO-73-3144 | Larry Sanders | 60 | 200 | 7 | Wissahickon | D |

D = Domestic

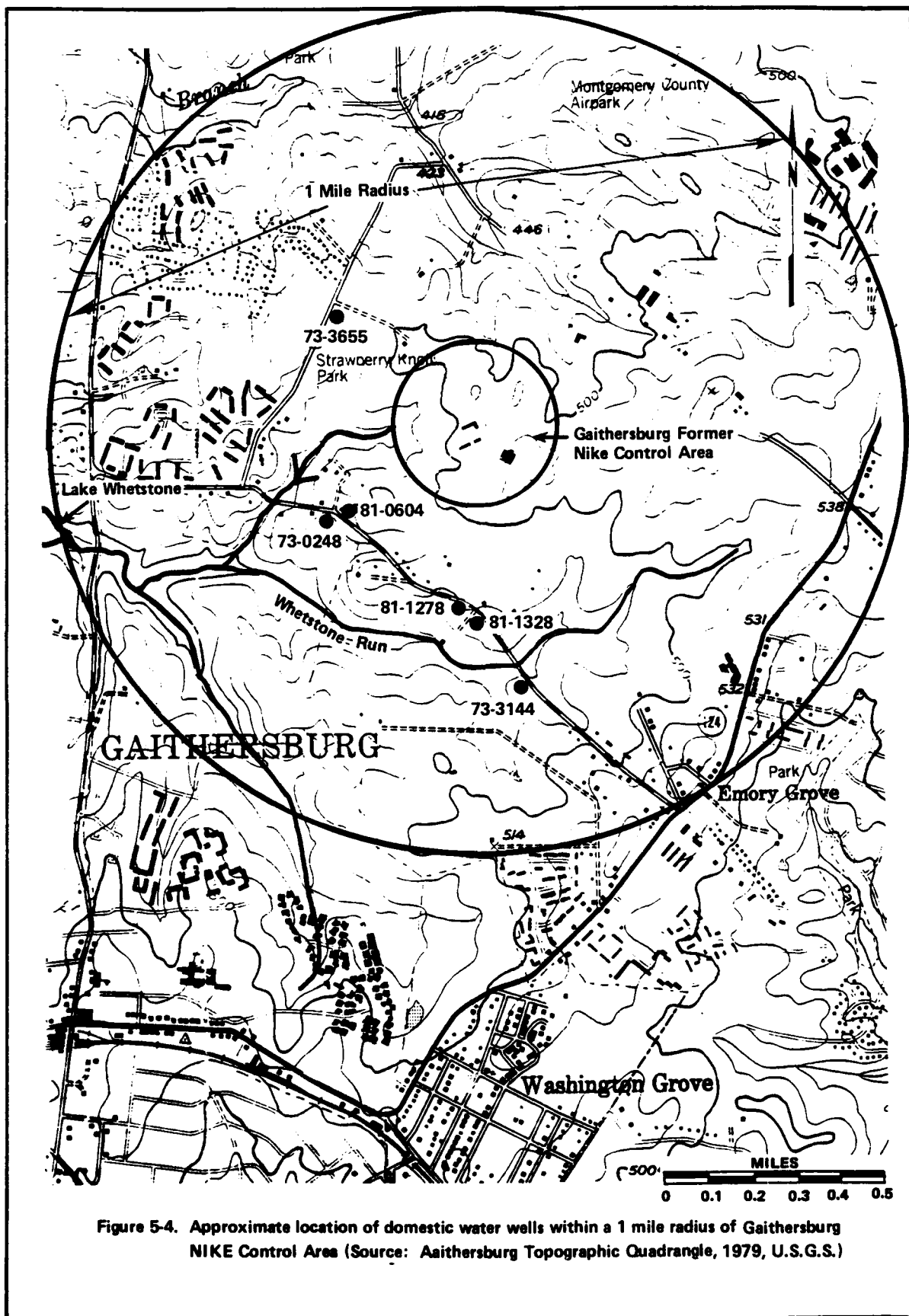


Figure 5-4. Approximate location of domestic water wells within a 1 mile radius of Gaithersburg Nike Control Area (Source: Gaithersburg Topographic Quadrangle, 1979, U.S.G.S.)

TABLE 5-11 GROUND-WATER ANALYTICAL RESULTS (µg/L) FOR SAMPLES COLLECTED
AT THE GAITHERSBURG NIKE CONTROL SITE

| | Monitoring Well Numbers | | | |
|----------------------|-------------------------|--------------|--------------|--------------|
| | <u>GNC-5</u> | <u>GNC-6</u> | <u>GNC-7</u> | <u>GNC-8</u> |
| VOLATILE ORGANICS | <CRL | <CRL | <CRL | <CRL |
| SEMIVOLATILES | | | | |
| Di-n-octyl phthalate | <CRL | 23.7 | 36.8 | 24.9 |
| PESTICIDES/PCB | <CRL | <CRL | <CRL | <CRL |
| DISSOLVED METALS | | | | |
| Antimony | <CRL | <CRL | <CRL | 3.0 |
| Arsenic | <CRL | <CRL | <CRL | <CRL |
| Beryllium | <CRL | <CRL | <CRL | <CRL |
| Cadmium | 8.15 | 6.97 | 6.65 | <CRL |
| Chromium (total) | <CRL | <CRL | <CRL | <CRL |
| Copper | <CRL | <CRL | <CRL | 8.00 |
| Lead | <CRL | <CRL | <CRL | <CRL |
| Mercury | 0.16 | 0.11 | 0.10 | 0.15 |
| Nickel | <CRL | <CRL | 33.3 | <CRL |
| Selenium | <CRL | <CRL | <CRL | <CRL |
| Silver | <CRL | <CRL | <CRL | <CRL |
| Thallium | <CRL | <CRL | <CRL | <CRL |
| Zinc | 30.5 | 19.4 | 19.4 | 21.1 |
| NON-METALS | | | | |
| Cyanide (total) | <CRL | <CRL | <CRL | <CRL |
| Phenols (total) | <CRL | <CRL | <CRL | <CRL |

CRL = Certified Reporting Limit

was elevated iron concentrations--particularly in the treated/distributed water supply. No VOCs were detected. These data are included in Appendix D.

5.2.3.2 Soils

Analytical results for soil samples are summarized in Table 5-12 and presented in Appendix D. Volatile organic compounds were not detected above the CRLs. A semivolatile organic compound, Bis(2-ethylhexyl) phthalate, was detected in soil sample SS-8 at a concentration of 6.82 ug/g. Phthalates are a common component of plastics and the detection of this compound is probably due to laboratory or field contamination and is not likely an indication of contamination. Metals detected above the CRLs include Antimony (SS-8), Arsenic (SS-7), Beryllium (SS-6, 7, 8), total Chromium (SS-6, 7, 8), Copper (SS-6, 7, 8), Mercury (SS-7), Nickel (SS-6, 7, 8), and Zinc (SS-6, 7, 8).

These levels are well within the expected background range for soils typical of the site.

TABLE 5-12 SUMMARY OF ANALYTICAL RESULTS ($\mu\text{g/g}$) FOR SOIL SAMPLES
COLLECTED AT THE GAITHERSBURG NIKE CONTROL SITE

| | <u>SS-6</u> | <u>SS-7</u> | <u>SS-8</u> |
|----------------------------|-------------|-------------|-------------|
| VOLATILE ORGANICS | <CRL | <CRL | <CRL |
| SEMIVOLATILES | | | |
| bis(2-Ethylhexyl)phthalate | <CRL | <CRL | 6.82 |
| PESTICIDES/PCB | <CRL | <CRL | <CRL |
| DISSOLVED METALS | | | |
| Antimony | <CRL | <CRL | 1.17 |
| Arsenic | | 2.55 | |
| Beryllium | 0.731 | 1.58 | 1.60 |
| Cadmium | <CRL | <CRL | <CRL |
| Chromium (total) | 10.4 | 40.3 | 24.2 |
| Copper | 20.5 | 100.0 | 29.5 |
| Lead | <CRL | <CRL | <CRL |
| Mercury | <CRL | 0.02 | <CRL |
| Nickel | 4.07 | 36.1 | 29.4 |
| Selenium | <CRL | <CRL | <CRL |
| Silver | <CRL | <CRL | <CRL |
| Thallium | <CRL | <CRL | <CRL |
| Zinc | 20.8 | 100.0 | 151.0 |
| NON-METALS | | | |
| Cyanide (total) | <CRL | <CRL | <CRL |
| Phenols (total) | <CRL | <CRL | <CRL |

CRL = Certified Reporting Limit

6. CONCLUSIONS

The overall objective and scope of this PA/SI study were to evaluate the available information relative to past Army operations, review the initial installation assessment document, and develop a field sampling plan to address the potential for contamination problems associated with past Army operations. The field sampling plan for this PA/SI study was developed with the idea of obtaining sufficient data to ascertain the need for further environmental work. Ground-water, surface water, and soil samples were collected for analysis in proximity to potential contaminant source areas located at each site. The following sections provide the conclusions that have been drawn from the chemical analysis of the samples collected.

6.1 GAITHERSBURG NIKE LAUNCH SITE

The Launch area data assessment indicates that there is no evidence of volatile organic contamination in any of the samples collected. The low level detection of the two phthalate compounds Bis(2-ethylhexyl)phthalate in GNL-4 and Di-n-octyl phthalate in GNL-SW-1, a surface water sample, probably is due to field or laboratory contamination. Phthalate compounds in general are ubiquitous in nature and it is likely that the detection of the compounds is not due to past Army operations. The detection of cadmium in all samples including the field blank suggests that field contamination is the likely source of the cadmium and not due to past Army operations. The detection of lead in GNL-3 at 35 ppb is below the current MCL of 50 ppb, but is higher than the proposed MCL and MCLG of 5 and 0 µg/L, respectively. The lead level in the GNL-3 water sample may be a problem in the future if the proposed MCL or MCLG is classified as final. Items not addressed fully, during this PA/SI at the launch area include the 1,000-gal fuel oil UST, and the potential for PCBs to be in the hydraulic fluid in the missile storage structures. Also, the potential for asbestos material in the missile storage structures has not been evaluated.

6.2 GAITHERSBURG NIKE CONTROL

The Control area data assessment also indicates that there is no evidence of volatile organic, pesticide, PCB, or total cyanide and phenol contamination in any of the samples collected at the site. As was the case at the Launch site, a semivolatile compound, Di-n-octyl phthalate, was detected at low levels in ground-water samples collected from GNC-6, 7, and 8 ranging from 23.7 to 36.8 ppb. As stated in the Launch area conclusions, the presence of this compound may be attributed to field or laboratory contamination and is not likely due to past Army operations. The detected cadmium levels in GNC-5, 6, and 7 also are viewed consistent with the Launch area data assessment and conclusions because the sampling at both sites was performed as one sampling event. Again, the field blank contained approximately equal levels of cadmium, thus suggesting field contamination.

Items not fully addressed by this PA/SI study include the four USTs, dry well, transformers, asbestos, and lead paint.

7. RECOMMENDATIONS

The future use of these sites, and in particular the potential for ground-water use, should be considered when decisions are made concerning the need for additional ground-water monitoring. Both of these sites are in close proximity to a municipal water system and it is likely that this system would supply water to the sites instead of relying on ground-water. If, however, the future development plans include ground-water use, an additional comprehensive ground-water sampling event is recommended to further define the low level of lead detected in well GNL-3, confirm or deny the cadmium levels detected, and to provide a greater level of assurance beyond a single sampling round.

The other potential areas of concern not addressed fully during this PA/SI include the dry well and four former USTs at the Control area and one UST at the Launch area, plus the potential for asbestos materials at both sites. Also the hydraulic fluid in the hydraulic lift systems in the missile storages structures at the Launch area and the transformers at the Control area should be sampled and analyzed for PCB. It is understood that USATHAMA intends to address these items during a follow-up investigation.

REFERENCES

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APPENDIX A

SOIL BORING LOGS AND WELL COMPLETION DIAGRAMS

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-1

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 516.36 FT.

Casing Above Surface: 2.13 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

Completion Date: 12 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DPTH | BLOWS/6" | DVA PPH | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS LEVEL GRASSY FIELD, SUNNY HIGH 50'S |
|------------------|------------|------------|-------------|--------------|----------|------------|---------------|--------------|---|
| SOIL DESCRIPTION | | | | | | | | | |
| SPT | 18 | 8 | 1 | 1 | 3-4-4 | 0 | X | ML | MODERATE BROWN (5YR4/4), S. MOIST CLAYEY SILT, MICACEOUS MEDIUM STIFF |
| SPT | 18 | 15 | 2 | 6 | 3-4-7 | 0 | X | ML SM | MOTTLED, LIGHT BROWN (5YR5/6) TO BLACK (N1), S. MOIST, CLAYEY SILT WITH FINE SAND, MICACEOUS, MEDIUM STIFF LIGHT BROWN (5YR5/6), S. MOIST, SILTY FINE SAND WITH CLAY, MED. DENSE |
| SPT | 18 | 18 | 3 | 11 | 15-11-9 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) S. MOIST, SILT WITH CLAY AND SAND, SOAPY SCHISTOSE TEXTURE, MICACEOUS, VERY STIFF, SAPROLITE |
| SPT | 18 | 14 | 4 | 16 | 7-14-15 | 0 | X | ML | MOTTLED MODERATE YELLOW BROWN (10YR5/4), LIGHT BROWN (5YR 5/6), BLACK (N1), S. MOIST, CLAYEY SILT WITH SAND, QUARTZITE ROCK FRAGMENT SAPROLITE |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVEYON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. BNL-1

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 516.36 FT.

Casing Above Surface: 2.13 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

RSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

Completion Date: 12 APRIL 1989

| SAMP TYPE | IN DRWN | IN RCVD | SAMP NO. | SAMP DEPTH | BLOWS/6" | DVA PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS LEVEL GRASSY FIELD, SUNNY HIGH 50'S |
|------------------|------------|------------|-------------|---------------|----------|------------|---------------|--------------|---|
| SOIL DESCRIPTION | | | | | | | | | |
| SPT | 18 | 18 | 5 | 21 | 10-16-16 | 0 | X | ML | GREENISH GRAY (56Y6/1), TO LIGHT BROWN (5YR5/6), S. MOIST, CLAYEY SILT WITH SAND, HARD, SAPROLITE |
| SPT | 18 | 18 | 6 | 26 | 7-12-15 | 0 | X | ML | MODERATE YELLOWISH BROWN (10YR5/4), S. MOIST, CLAYEY SILT, VERY STIFF, SAPROLITE, INCREASE IN MOISTURE AT BASE OF SPOON |
| SPT | 18 | 18 | 7 | 31 | 10-10-11 | 0 | X | ML | S. MOIST SAPROLITE, SAME AS ABOVE |
| SPT | 18 | 18 | 8 | 36 | 4-7-9 | 0 | X | ML | MOTTLED GREENISH GRAY (56Y6/1), LIGHT BROWN (5YR5/6), BLACK (N1), MOIST, CLAYEY SILT, STIFF, SAPROLITE |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LLOYTON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-1

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 516.36 FT.

Casing Above Surface: 2.13 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

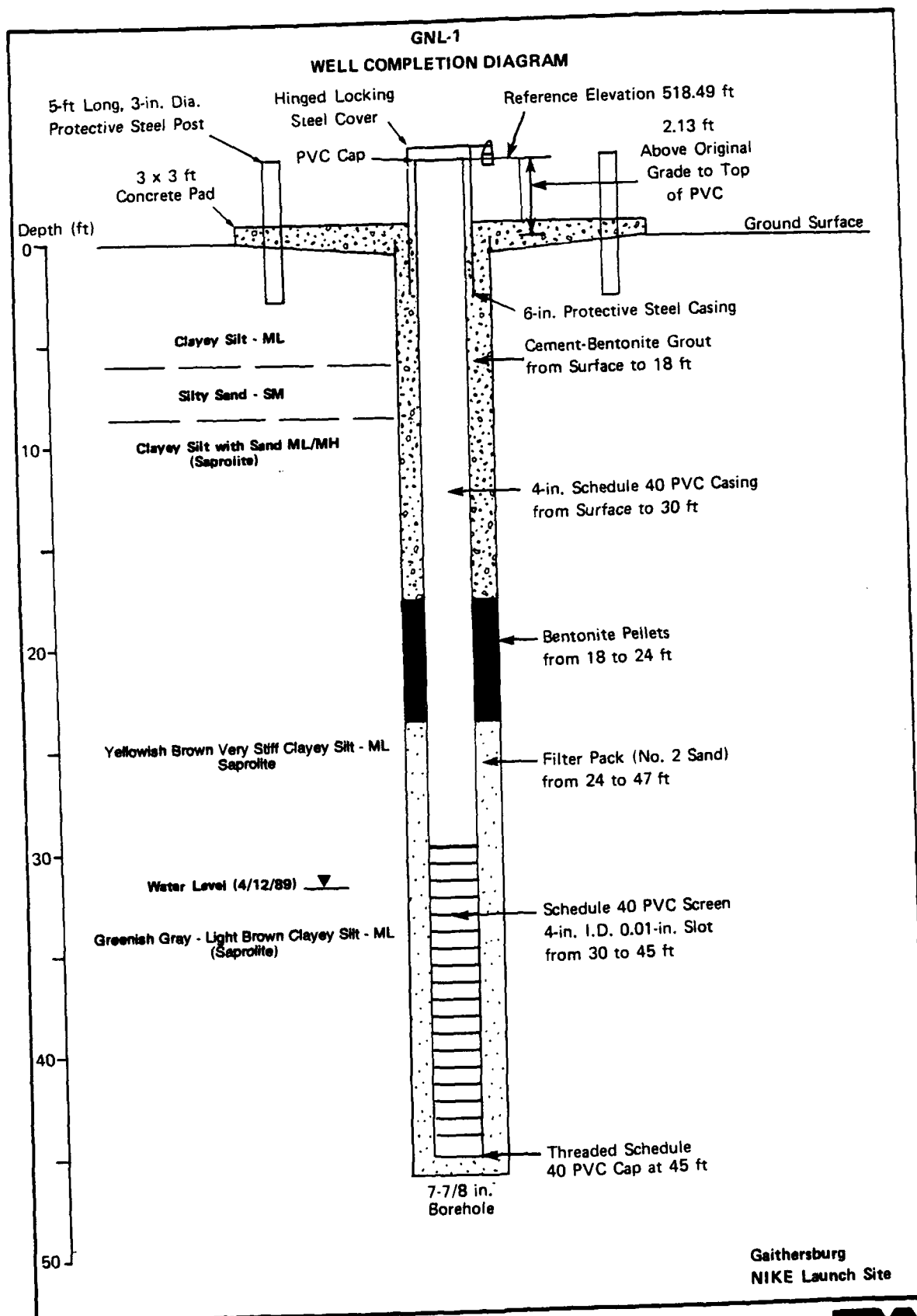
Completion Date: 12 APRIL 1989

| SAMP TYPE | IN DOWN | IN RCVD | SAMP NO. | SAMP DEPTH | BLOWS/6" | OVA PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS |
|--------------|------------|------------|-------------|---------------|-----------|------------|---------------|--------------|--|
| | | | | | | | | | LEVEL GRASSY FIELD, SUNNY HIGH 50'S |
| | | | | | | | | | SOIL DESCRIPTION |
| SPT | 9 | 9 | 9 | 41 | 15-51/3" | 0 | X | ML | WET SPOON GREENISH GRAY (56Y6/1), TO LIGHT BROWN (5YR5/6), MOIST, CLAYEY SILT WITH SAND, HARD, SAPROLITE |
| SPT | 13 | 8 | 10 | 46 | 14- 55/5" | 0 | X | ML | SAPROLITE , SAME AS ABOVE |
| | | | | | | | | | AUGERS TO 45', LEAVE IN HOLE OVERNIGHT IN ORDER TO MEASURE STATIC WATER LEVEL |
| | | | | | | | | | HOLE CAVED TO 40', REEMED HOLE TO 50', PULLED AUGERS HOLE CAVED TO 47', BACKFILL HOLE W/ SAND PACK TO 45' |
| | | | | | | | | | INSTALL MONITORING WELL 4-12-89 |
| | | | | | | | | | NO. 10 SLOT 4" ID PVC SCREEN 45-30' (15') |
| | | | | | | | | | 4" PVC RISER CASING 30'-SURFACE (30') |
| | | | | | | | | | NO. 2 SAND PACK 47'-24' (23') |
| | | | | | | | | | BENTONITE PELLETS 24'-18' (6') |
| | | | | | | | | | BENT.-CEMENT GROUT 18'-SURFACE (18') |
| | | | | | | | | | 6" PROTECTIVE STEEL CASING AND LOCKING CAP |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-2

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 503.74 FT.

Casing Above Surface: 2.17 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 12 APRIL 1989

Completion Date: 13 APRIL 1989

| SAMP TYPE | IN DRY | IN RCVD | SAMP NO. | SAMP DEPTH | BLOWS/6" | OVA PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS LEVEL GRASSY FIELD, SUNNY HIGH 50'S |
|------------------|-----------|------------|-------------|---------------|----------|------------|---------------|--------------|---|
| SOIL DESCRIPTION | | | | | | | | | |
| SPT | 18 | 9 | 1 | 1 | 2-3-5 | 0 | X | CL | MODERATE BROWN (5YR4/4), S. MOIST, SILTY CLAY, WITH MINOR GRAVEL AT TOP, MICACEOUS, MEDIUM STIFF |
| SPT | 18 | 18 | 2 | 6 | 2-4-4 | 0 | X | ML | MOTTLED, LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), TO BLACK (N1) S. MOIST, CLAYEY SILT, MICACEOUS, MEDIUM STIFF, SCHISTOSE TEXTURE, SAPROLITE |
| SPT | 18 | 18 | 3 | 11 | 4-6-11 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) S. MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, MICACEOUS, STIFF, SAPROLITE |
| SPT | 18 | 18 | 4 | 16 | 9-11-16 | 0 | X | ML | MOTTLED MODERATE YELLOW BROWN (10YR5/4), GREENISH GRAY (5GY 6/1), BLACK (N1), MOIST, CLAYEY SILT, MICACEOUS, VERY STIFF, SAPROLITE |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVELTON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-2

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 503.74 FT.

Casing Above Surface: 2.17 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG.

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 12 APRIL 1989

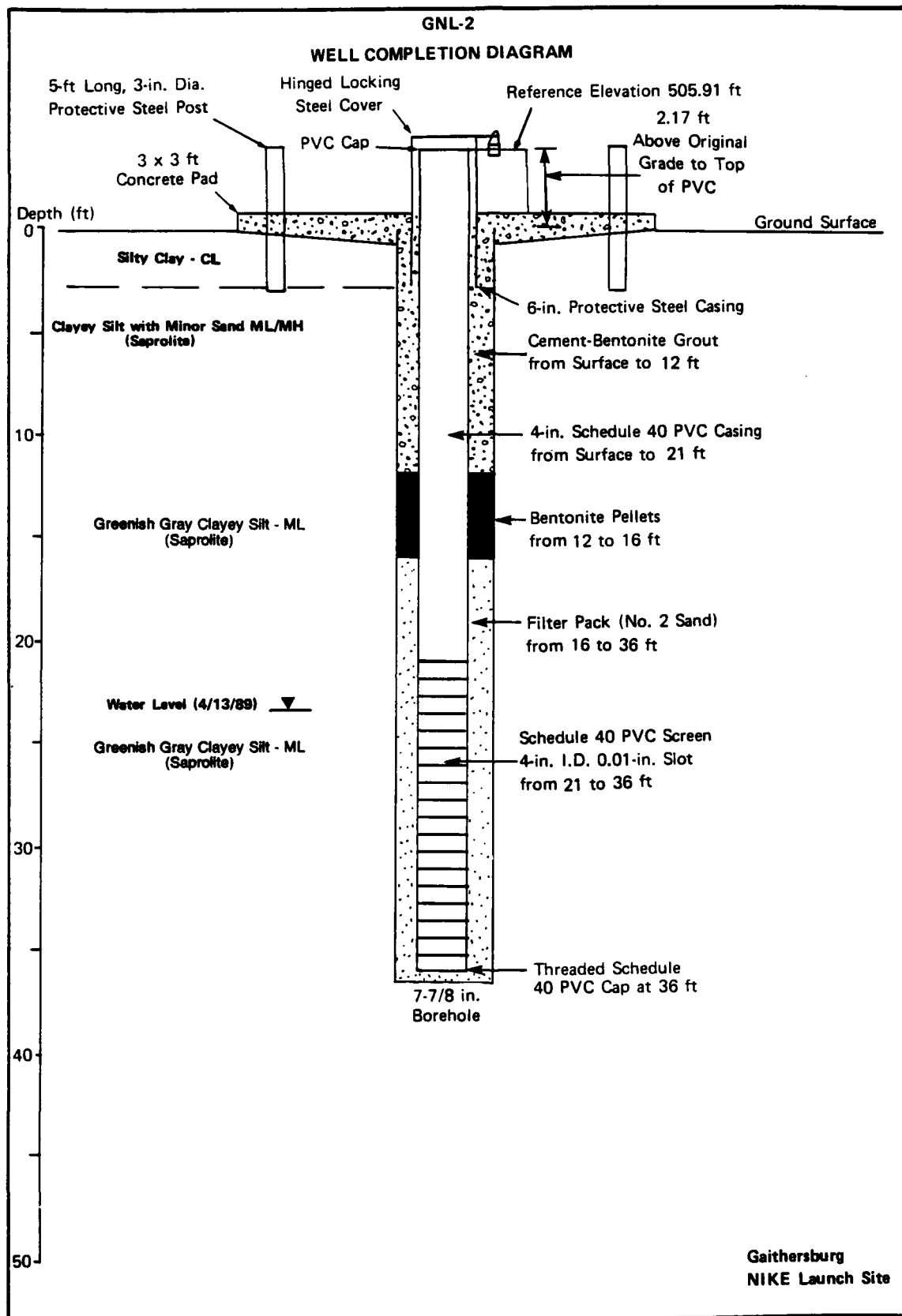
Completion Date: 13 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DEPTH | BLOWS/6" | OVA PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS |
|--------------|------------|------------|-------------|---------------|----------|------------|---------------|--------------|---|
| | | | | | | | | | LEVEL GRASSY FIELD, SUNNY HIGH 50'S |
| | | | | | | | | | SOIL DESCRIPTION |
| SPT | 18 | 18 | 5 | 21 | 4-11-12 | 0 | X | ML | MOIST SAPROLITE, SAME AS ABOVE WITH MINOR GRAVEL |
| SPT | 18 | 18 | 6 | 26 | 18-12-15 | 0 | X | ML | MOTTLED, LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), TO BLACK (N1) MOIST, CLAYEY SILT, MICACEOUS, VERY STIFF, SCHISTOSE TEXTURE, SAPROLITE |
| SPT | 18 | 18 | 7 | 31 | 14-14-16 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) V. MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, MICACEOUS, VERY STIFF, SAPROLITE |
| | | | | | | | | | AUGERS TO 39', PULLED AUGERS HOLE CAVED TO 36' |
| | | | | | | | | | INSTALLED MONITORING WELL 4-13-89 |
| | | | | | | | | | NO. 10 SLOT 4" PVC SCREEN 36'-21' (15') |
| | | | | | | | | | 4" PVC RISER CASING 21'-SURFACE (21') |
| | | | | | | | | | NO. 2 SAND PACK 36'-16' (20') |
| | | | | | | | | | BENTONITE PELLETS 16'-12' (4') |
| | | | | | | | | | BENT.-CEMENT GROUT 12'-SURFACE (12') |
| | | | | | | | | | 6" PROTECTIVE STEEL CASING AND LOCKING CAP |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. BNL-3

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 504.29 FT.

Casing Above Surface: 2.23 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON. DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 13 APRIL 1989

Completion Date: 13 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DEPTH | BLOWS/6" | QVA PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS SLOPING GRASSY FIELD, PARTLY CLOUDY MID 50'S |
|--------------|------------|------------|-------------|---------------|----------|------------|---------------|--------------|--|
| | | | | | | | | | SOIL DESCRIPTION |
| SPT | 18 | 18 | 1 | 1 | 2-2-2 | 0 | X | CL | MODERATE BROWN (5YR4/4), S. MOIST, SILTY CLAY, WITH MINOR GRAVEL, SOFT |
| SPT | 18 | 18 | 2 | 6 | 3-3-5 | 0 | X | ML | MOTTLED, GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR5/6) TO BLACK (N1) CLAYEY SILT, MICACEOUS, SCHISTOSE TEXTURE, MEDIUM STIFF, SAPROLITE |
| SPT | 18 | 18 | 3 | 11 | 3-4-5 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) S. MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, MEDIUM STIFF, SAPROLITE |
| SPT | 18 | 18 | 4 | 16 | 4-5-9 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR 5/6), BLACK (N1), S. MOIST, CLAYEY SILT, STIFF, SAPROLITE |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENSBERG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LAMETON CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. GNL-3

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 504.29 FT.

Casing Above Surface: 2.23 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 13 APRIL 1989

Completion Date: 13 APRIL 1989

| SAMP TYPE | IN DRN | IN RCVD | SAMP NO. | SAMP DPTH | BLOWS/6" | UVA PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS SLOPPING GRASSY FIELD, PARTLY CLOUDY MID 50'S |
|------------------|-----------|------------|-------------|--------------|----------|------------|---------------|--------------|---|
| SOIL DESCRIPTION | | | | | | | | | |
| SPT | 18 | 18 | 5 | 21 | 7-9-11 | 0 | X | ML | LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), BLACK (N1), S. MOIST, CLAYEY SILT, VERY STIFF, SAPROLITE |
| SPT | 18 | 18 | 6 | 26 | 8-9-11 | 0 | X | ML | MOTTLED, GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR5/6) TO BLACK (N1), CLAYEY SILT, MICACEOUS, SCHISTOSE TEXTURE, VERY STIFF, SAPROLITE |
| SPT | 18 | 18 | 7 | 31 | 7-13-20 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR5/6) S.MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, HARD, SAPROLITE INCREASING MOISTURE @ BASE OF SPOON |
| SPT | 18 | 18 | 8 | 35 | 9-15-26 | 0 | X | ML | WET SPOON MOTTLED GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR 5/6), BLACK (N1), MOIST, CLAYEY SILT, HARD, SAPROLITE |
| | | | | | | | 40 | | |

SAMPLER TYPE
SS-DRIVEN SPLIT SPOON
SH-PRESSED SHELBY TUBE
OST-OSTENBURG PISTON SAMPLER
DEN-DENISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HRS.
AFTER 24 HRS.

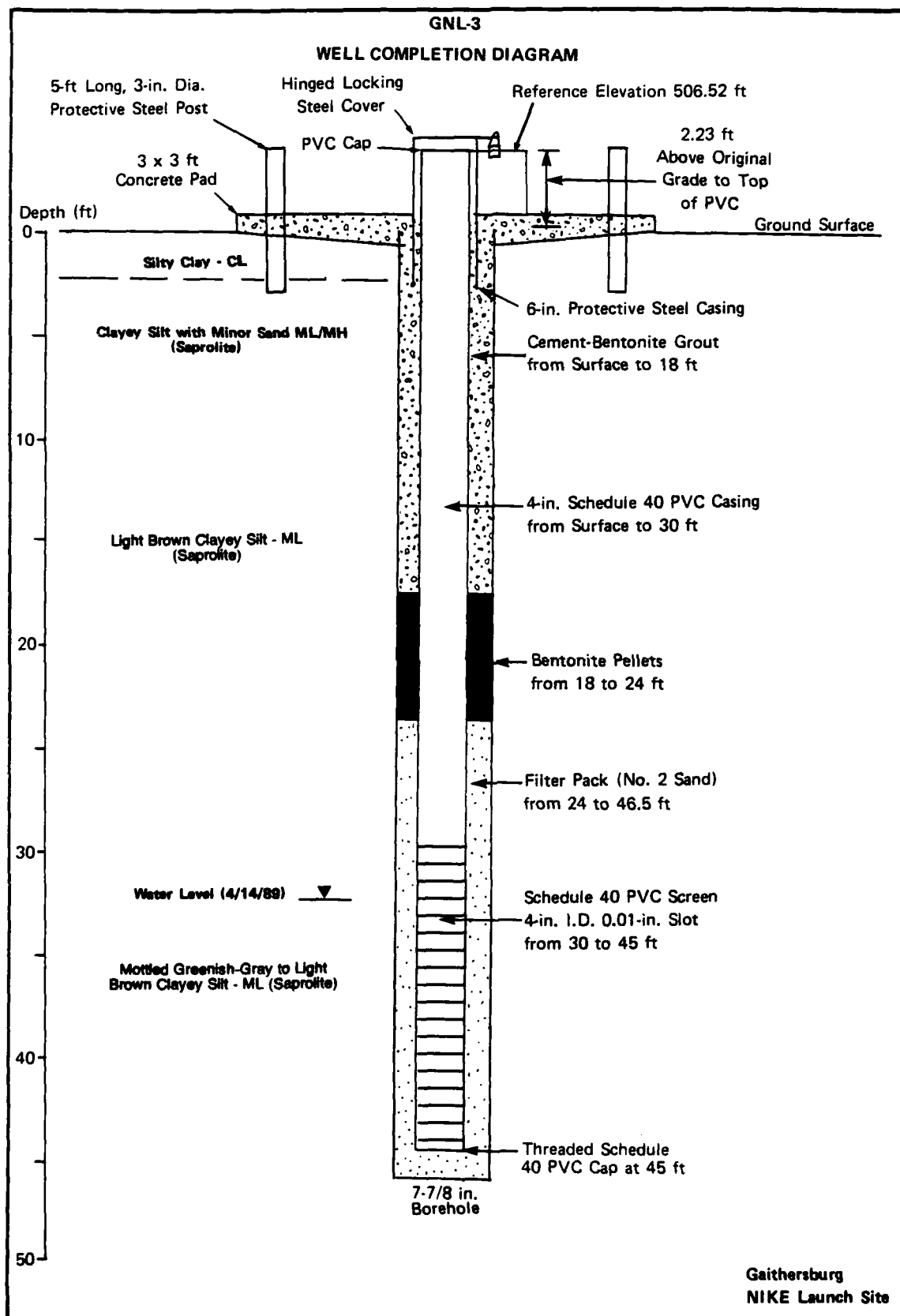
FT.
FT.
FT.

LOG OF SOIL BORING

FILE: 301-771-4950

Completion Date: 13 APRIL 1989

FT.
FT.
FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-4

Coordinates:

Geologist: S. BROWN

Surface Elevation: 464.81 FT.

Casing Above Surface: 2.41 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: AC = AUGER CUTTINGS, SOIL SAMPLES COLLECTED FROM
AUGER CUTTINGS DUE TO RIG POSITION

Start Date: 18 APRIL 1989

Completion Date: 18 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DPTH | BLOWS/6" | PID PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS FLAT, DRY, GRASSY AREA, DOWN GRADIENT OF FILTER BED |
|------------------|------------|------------|-------------|--------------|----------|------------|---------------|--------------|--|
| SOIL DESCRIPTION | | | | | | | | | |
| AC | | | 1 | 1 | | 0 | X | ML | MODERATE REDDISH BROWN (10R4/6), S. MOIST CLAYEY SILT, MICACEOUS |
| AC | | | 2 | 6 | | 0 | X | ML | MODERATE OLIVE BROWN(5Y4/4), MOIST, SILT WITH LITTLE CLAY, MICACEOUS |
| AC | | | 3 | 11 | | 0 | X | ML | MODERATE OLIVE BROWN(5Y4/4), MOIST, SILT, LITTLE FINE SAND, TRACE CLAY, MICACEOUS |
| AC | | | 4 | 16 | | 0 | X | ML | INCREASING MOISTURE GRAYISH OLIVE (10Y4/2), MOIST, SILT AND V.FINE SAND, TRACE CLAY |
| | | | | | | | 20 | | |

SAMPLER TYPE
SS-DRIVEN SPLIT SPOON
SH-PRESSED SHELBY TUBE
OST-OSTENBURG PISTON SAMPLER
DEX-DENISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HRS.
AFTER 24 HRS.

FT.
FT.
FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

1500 VENTURE DRIVE SPARTANBURG, MARYLAND 21152 TEL: 301-771-4930

2014年12月15日

Coordinates:

Geologist: S. BROWN

Surface Elevation: 464.81 FT.

Casing Above Surface: 2.41 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG.

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: AC = AUGER CUTTINGS. SOIL SAMPLES COLLECTED FROM
AUGER CUTTINGS DUE TO RIG POSITION

Start Date: 16 APRIL 1989

Completion Date: 18 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DPTH | BLOWS/6" | FID PPM | DEPTH FEET | GRAPH LOG |
|--------------|------------|------------|-------------|--------------|----------|------------|---------------|--------------|
| | | | | | | | 20 | |
| AC | | | 5 | 21 | | 0 | X | ML |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | 25 | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | 30 | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | 35 | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | - | |
| | | | | | | | 40 | |

SURFACE CONDITIONS
FLAT, DRY, GRASSY AREA, DOWN GRADIENT OF FILTER BED

SOIL DESCRIPTION

OLIVE GRAY (SY3/2), MOIST, SILT. MINOR ROCK FRAGMENTS, MICACEOUS

VERY HARD DRILLING @ 20'

INTSALL MONITORING WELL 4-18-89

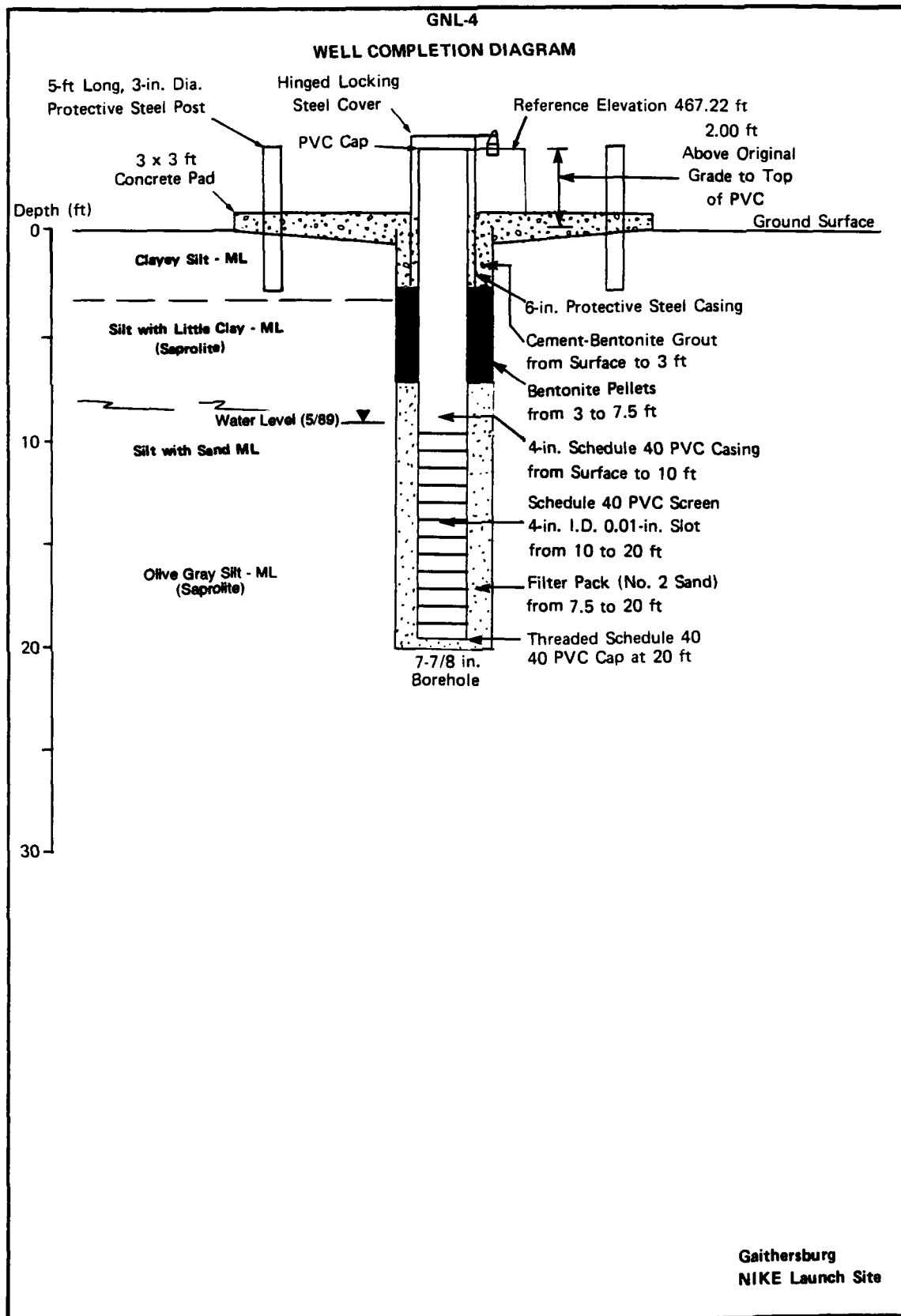
- NO. 10 SLOT 4" ID PVC SCREEN 20'-10' (10')
- 4" PVC RISER CASING 10'-SURFACE (10')
- NO. 2 SAND PACK 20'-7.5' (12.5')
- BENTONITE PELLETS 7.5'-3' (4.5')
- GENT.-CEMENT GROUT 3'-SURFACE (3')
- 6" PROTECTIVE STEEL CASING AND LOCKING CAP

SAMPLER TYPE
36-DRIVEN SPLIT SPOON
36-PRESSED SHELBY TUBE
DST-DSTENBURG PISTON SAMPLER
DEN-DENISON CORE BARREL SAMPLER
SP-STANDARD PENETRATION TEST (ASTM D 1586-24)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION

| | |
|-------|---------|
| AFTER | HRS. |
| AFTER | 24 HRS. |

111.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNC-5

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 520.82 FT.

Casing Above Surface: 1.93 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 10 APRIL 1989

Completion Date: 10 APRIL 1989

| SAMP TYPE | IN DRY | IN RCVD | SAMP NO. | SAMP DPTH | BLOWS/6" | PID PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS LEVEL GRASSY FIELD, CLOUDY, MID 40'S |
|------------------|-----------|------------|-------------|--------------|----------|------------|---------------|--------------|---|
| SOIL DESCRIPTION | | | | | | | | | |
| SPT | 18 | 10 | 1 | 1 | 3-4-5 | 0 | X | CL | MODERATE BROWN (5YR4/4), S. MOIST SILTY CLAY, MEDIUM STIFF |
| SPT | 18 | 16 | 2 | 6 | 6-7-6 | 0 | X | SM | MODERATE REDDISH BROWN (10R4/6), DRY, SILTY FINE SAND, MEDIUM DENSE, MICACEOUS |
| SPT | 18 | 11 | 3 | 11 | 6-8-12 | 0 | X | ML | MOTTLED MODERATE YELLOWISH BROWN (10YR5/4) TO LIGHT BROWN (5YR5/6) S. MOIST, SANDY SILT WITH LITTLE CLAY, SOAPY SCHISTOSE TEXTURE, MICACEOUS, MEDIUM DENSE, SAPROLITE |
| SPT | 18 | 14 | 4 | 16 | 7-9-11 | 0 | X | ML | MOTTLED LIGHT BROWN (5YR 5/6) TO GREENISH GRAY (5GY6/1), S. MOIST, CLAYEY SILT WITH TRACE SAND, VERY STIFF, SCHISTOSE TEXTURE, SAPROLITE |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVELTON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNC-5

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 520.82 FT.

Casing Above Surface: 1.93 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

RSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 10 APRIL 1989

Completion Date: 10 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DEPTH | BLOWS/6" | PID PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS |
|--------------|------------|------------|-------------|---------------|----------|------------|---------------|--------------|---|
| | | | | | | | | | LEVEL GRASSY FIELD, CLOUDY, MID 40'S |
| | | | | | | | 20 | | SOIL DESCRIPTION |
| SPT | 18 | 9 | 5 | 21 | 8-11-16 | 0 | X | ML | MOTTLED MODERATE YELLOWISH BROWN (10YR4/4) TO GREENISH GRAY (5GY6/1) S. MOIST, CLAYEY SILT, VERY STIFF, MICACEOUS, SAPROLITE |
| | | | | | | | 25 | | |
| SPT | 18 | 12 | 6 | 26 | 4-10-16 | 0 | X | ML | MOTTLED MODERATE BROWN (5YR4/4) TO GREENISH GREY (5GY6/1), S. MOIST CLAYEY SILT WITH LITTLE FINE SAND, VERY STIFF, MICACEOUS, MINOR ROCK FRAGMENTS, SAPROLITE |
| | | | | | | | 30 | | |
| SPT | 18 | 10 | 7 | 31 | 3-12-22 | 0 | X | ML | S. MOIST SAPROLITE, SAME @ ABOVE |
| | | | | | | | 35 | | |
| SPT | 11 | 19 | 8 | 36 | 21-51/5" | 0 | X | ML | MOTTLED GRAYISH ORANGE (10YR7/4) TO GREENISH GRAY (5GY6/1), S. MOIST, CLAYEY SILT WITH TRACE SAND, HARD, SCHISTOSE TEXTURE, MICACEOUS, MINOR PHYLLITE ROCK FRAGMENTS, SAPROLITE |
| | | | | | | | 40 | | |

SAMPLER TYPE

SS-DRIVEN SPLIT SPOON

SH-PRESSED SHELBY TUBE

OST-OSTENBURG PISTON SAMPLER

DEN-DENISON CORE BARREL SAMPLER

SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE

AT COMPLETION

AFTER HRS.

AFTER 24 HRS.

FT.

FT.

FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVELTON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNC-5

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 520.82 FT.

Casing Above Surface: 1.93 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 10 APRIL 1989

Completion Date: 10 APRIL 1989

| SAMP TYPE | IN DRVN | IN RCVD | SAMP NO. | SAMP DPTH | BLOWS/6" | PID PPM | DEPTH FEET | GRAPH LOG | SURFACE CONDITIONS |
|--------------|------------|------------|-------------|--------------|----------|------------|---------------|--------------|---|
| | | | | | | | | | LEVEL GRASSY FIELD, CLOUDY, MID 40'S |
| | | | | | | | 40 | | SOIL DESCRIPTION |
| SPT | 18 | 16 | 9 | 41 | 16-26-38 | 0 | X | ML | MOTTLED MODERATE YELLOWISH BROWN (10YR4/4), GREENISH GRAY (5GY6/1) TO BLACK (N1), S. MOIST, CLAYEY SILT, HARD, MINOR ROCK FRAGS., MICACEOUS, SAPROLITE, SPOON MET @ 41' |
| | | | | | | | 45 | | |
| SPT | 18 | 18 | 10 | 46 | 44-34-50 | 0 | X | SM | MOTTLED GRAYISH ORANGE (10YR7/4) TO GREENISH GREY (5GY6/1), MOIST, SILTY SAND WITH LITTLE CLAY, VERY DENSE, MICACEOUS ROCK FRAGMENTS, SAPROLITE |
| | | | | | | | 50 | | |
| SPT | 18 | 18 | 11 | 51 | 20-30-38 | 0 | X | ML | GRAYISH ORANGE (10YR7/4), MOIST, CLAYEY SILT WITH LITTLE SAND HARD, METAMORPHIC ROCK FRAGMENTS, MICACEOUS |
| | | | | | | | | | AUGERS TO 50', PULLED AUGERS, HOLE CAVED TO 47' |
| | | | | | | | | | INSTALLED MONITORING WELL 4-10-89 |
| | | | | | | | 55 | | NO.10 SLOT 4" PVC SCREEN 47'-32' (15') |
| | | | | | | | | | 4" ID PVC RISER CASING 32'-SURFACE (32') |
| | | | | | | | | | NO.2 SAND PACK 47'-27' (20') |
| | | | | | | | | | BENTONITE PELLETS 27'-22.5' (4.5') |
| | | | | | | | | | BENT.-CEMENT GROUT 22.5'-SURFACE (22.5') |
| | | | | | | | | | 6" ID PROTECTIVE STEEL CASING AND LOCKING CAP |
| | | | | | | | 60 | | |

SAMPLER TYPE

SS-DRIVEN SPLIT SPOON

SH-PRESSED SHELBY TUBE

OST-OSTENBURG PISTON SAMPLER

DEM-DENISON CORE BARREL SAMPLER

SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE

AT COMPLETION

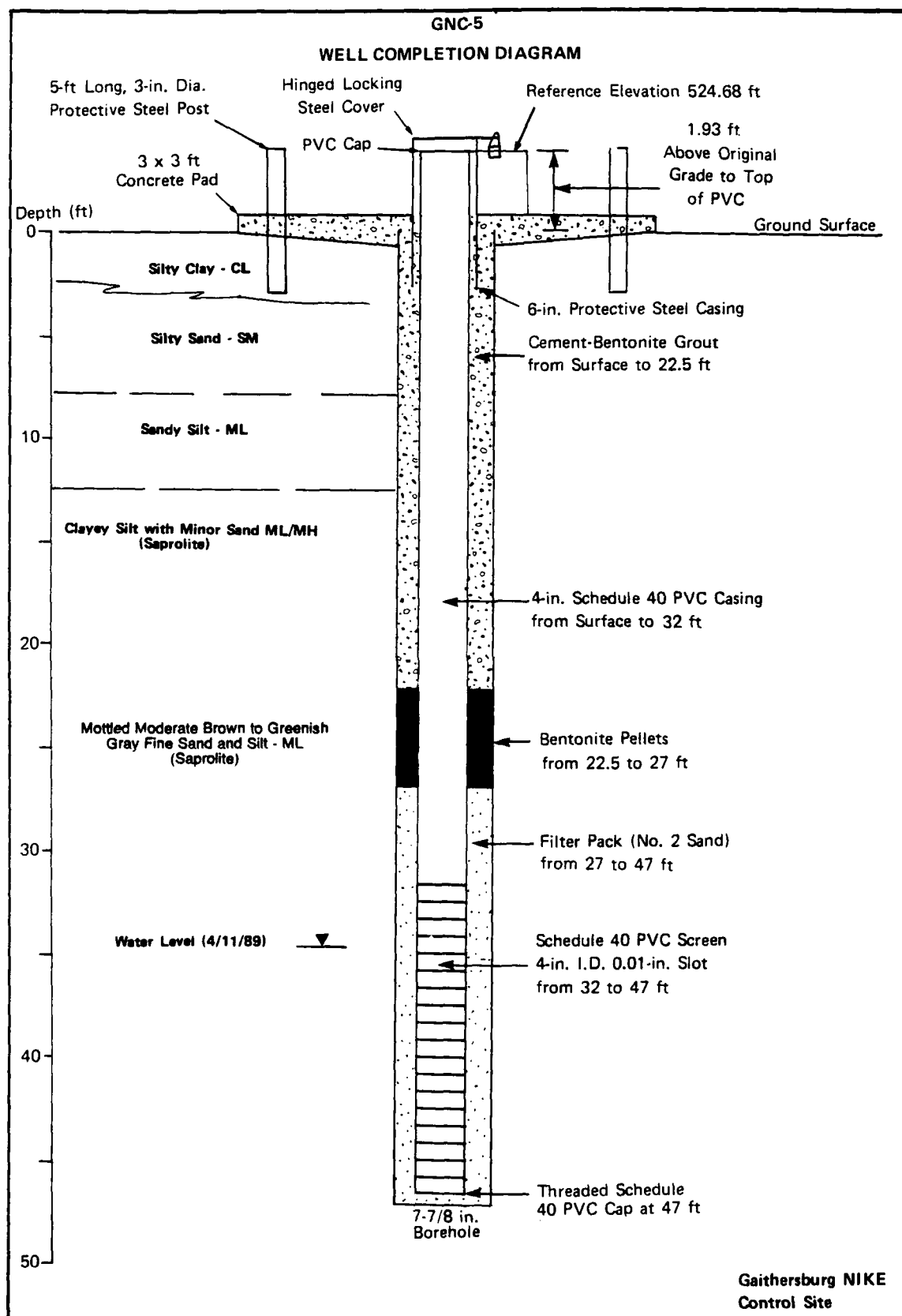
AFTER HRS.

AFTER 24 HRS.

FT.

FT.

FT.



LOG OF SOIL BORING

TELE: 301-771-4750

Completion Date: 17 APRIL 1999

SURFACE CONDITIONS
GRASSY AREA DOWNGRADIENT OF UST. DRY WELL. ENGINE GEN. BLDG.

901 國立成功大學附屬醫院

MODERATE BROWN (5YR 4/4), S. POLE, SILT, MEDIUM STIFF, SLIGHTLY

DARK YELLOWISH SPONGE (10-11-61, S. MOIST, SLT AND A.F. SAND,
LATE

DAKOTA YELLOWISH ORANGE CLAY/SH. S. MOLT. SILT AND V.F. SAND.
LARGE

MODERATE YELLOW BROWN (10YR 5/4). S. MOTT. SILT WITH TRACE
V.F. SAND. MICACEOUS. MEDIUM DENCE. SMALL ROCK FRAGMENTS.
SANDY LITE

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION

| | |
|-------|---------|
| SUPER | 163. |
| WATER | 24-163. |

11-11-4

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

JOHN D. DUFFY JAMES E. DUFFY TEL: 501-741-1330

[illegible]

Coordinates:

Investigator: W. BROWN

Elevation: 517.45 FT.

... ..

11. *Journal of the American Medical Association*, 277:1033-1034, 1997

Reference: 1000000000: 450000

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client:

Mobile 8-01 5711 512

100

Sampling Frame: All 1000 employees

[illegible]

10/15/99 17:44:11 1999

Completion Date: 17 APRIL 1992

| SAME TYPE | IN NO. | SOME DATA | BLOWN/6" | RTO REV | DEPTH FEET | SPACED LOG | SURFACE CONDITIONS GRASSY AREA DOWNGRADIENT OF UST. DRY WELL. ENGINE GEN. BLDG. |
|--------------|-----------|--------------|----------|------------|---------------|---------------|--|
| | | | | | 0 | | SOIL DESCRIPTION |
| SPT | 18 | 18 | 5 | 21 | 10-13-19 | ML | LIGHT ORANGE BROWN (5YR5/5), S. MOIST, SILT, HARD, MICACEOUS |
| | | | | | 15 | | |
| SPT | 18 | 18 | 8 | 28 | 20-40-25 | ML | LIGHT BROWN (5YR5/6), S. MOIST, SILT, HARD, SCHISTOSE TEXTURE, SAPROLITE |
| | | | | | 20 | | |
| SPT | 18 | 18 | 7 | 31 | 19-12-22 | ML | DARK YELLOWISH ORANGE (10YR5/6), MOIST, SILT, HARD, SAPROLITE |
| | | | | | | | COMPOSITE 6-7 AND 8-8 FOR CHEMICAL ANALYSIS |
| | | | | | 25 | | WET SPOON |
| SPT | 18 | 18 | 8 | 18 | 8-12-15 | ML | DARK YELLOWISH ORANGE (10YR5/6), MOIST, SILT, VERY STIFF, SAPROLITE |
| | | | | | 30 | | |

SAMPLER TYPE
 60-DEGREEE POINT BECON
 UNEXPRESSED SHELVY TUBE
 10"-10"SHURBURG PISTON SAMPLER
 60-DEGREEE CORE BARREL SAMPLER
 10"-STANDARD PENETRATION TEST 100 M 0 1586-54

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION

| | |
|-------|--------|
| AFTER | 156. |
| AFTER | 14.56. |

11-11-61

LOG OF SOIL BORING

REF ID: A6622

Coordinates:

Geologist: S. BROWN

Surf + Tide Elevation: 517.45 ft.

DATE: 12/29/2006 11:43:00 AM

Reference: 12/20/2010

Reference Description: 3F04AI

Report Date: 17 APR 1988

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: LEATHAMA

Drilling Method: MOBILE E-61 BRILL RIG.

REA: 7 7/8 IN. C.C., 1 3/8 IN. I.C.

Sampling Method: 37" - 24 IN. LONG, 1 3/8 IN. I.D.

CRUIT STATION DRIVEN TO BY BUS IN JANUARY 1968

Completion Date: 17 APRIL 1989

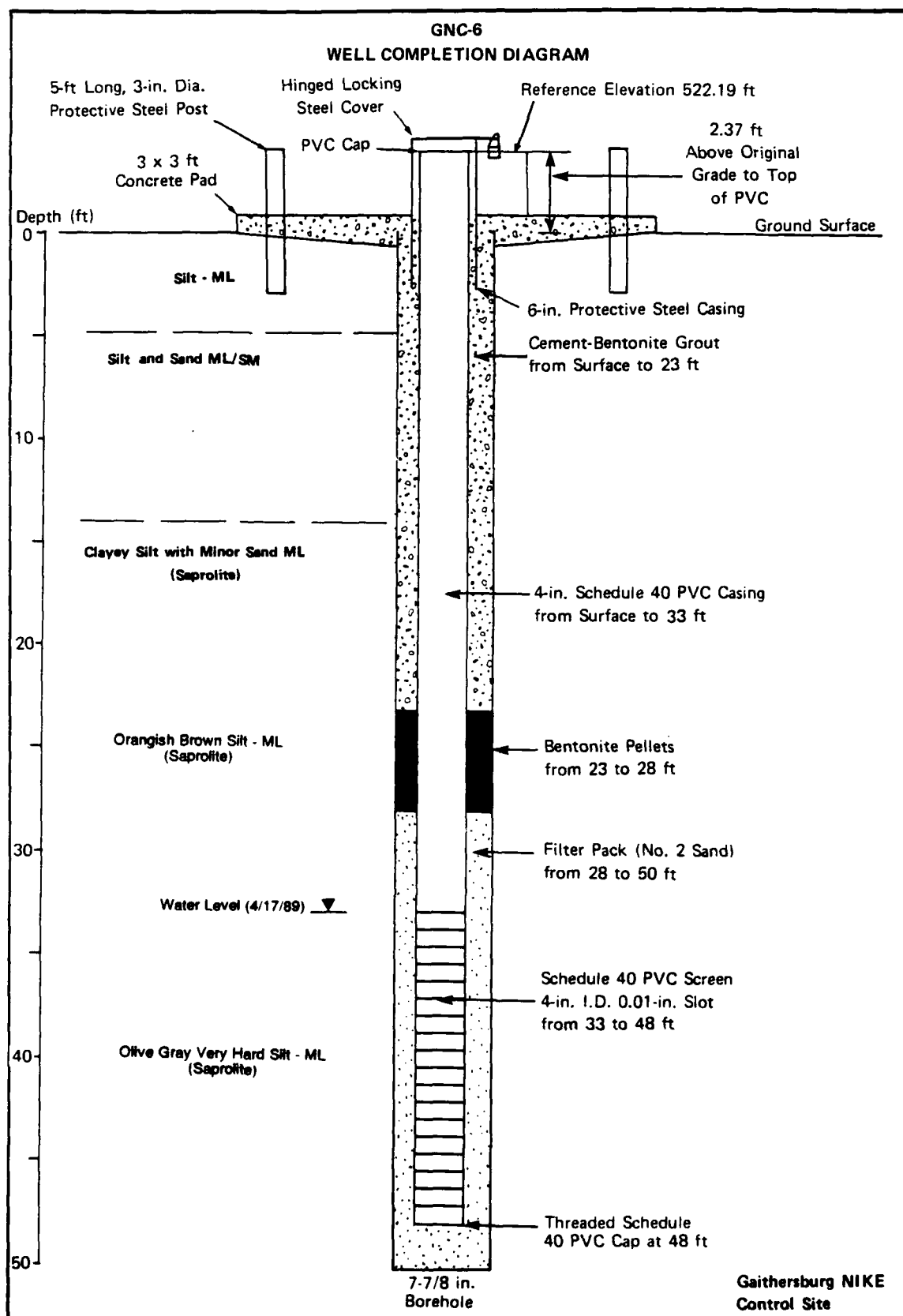
SAMPLER TYPE
 00-POUND GROUT SPOON
 01-HAND DRIVEN AUGER TUBE
 02-ROTATING PISTON SAMPLER
 03-JENKINSON CORE BARREL SAMPLER
 04-STANDARD PENETRATION TEST (ASTM D 1586-96)

GROUND-WATER DEPTH BELOW GRADE

NOT COMPLETED

100-443887-100

11-11-11



EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

REF ID: A66450

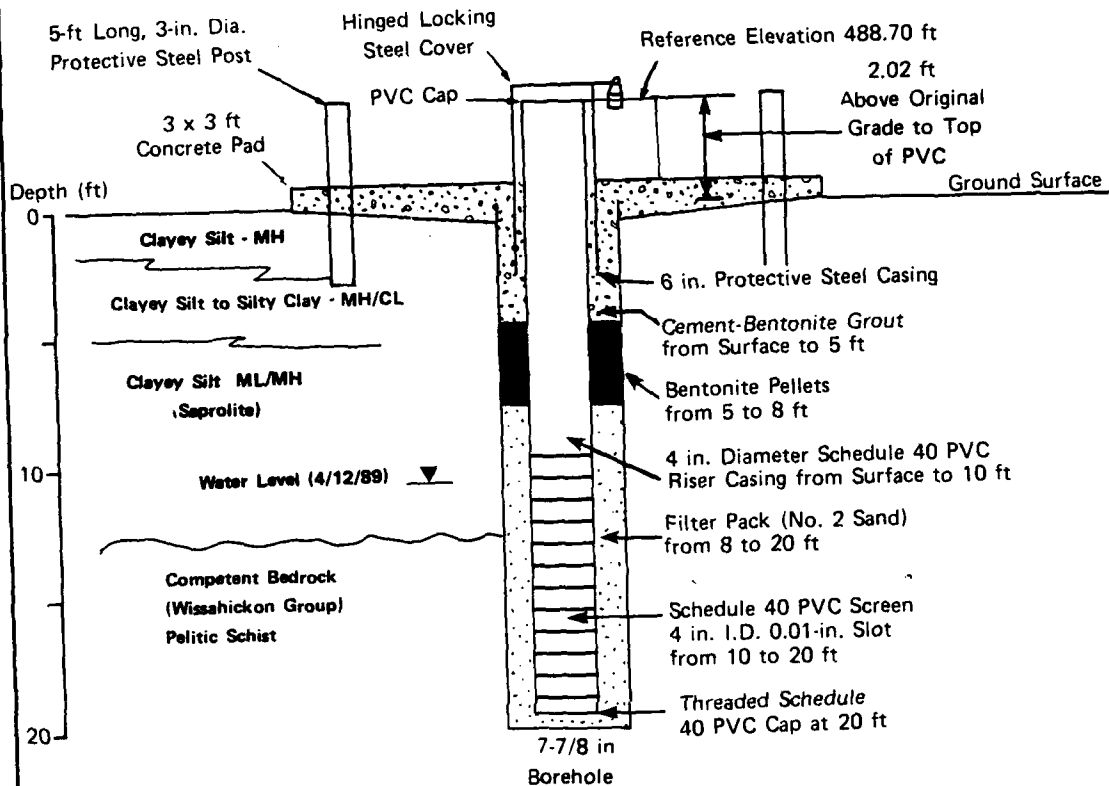
Completion Date: 14 APRIL 1969

| DATE | TIME | IN | SPR | WATER | BLOWS/FT | WATER | DEPTH | LOG | SURFACE CONDITIONS |
|------|------|----|-----|-------|----------|-------|-------|-------|---|
| DATE | TIME | IN | SPR | WATER | BLOWS/FT | WATER | DEPTH | LOG | LEVEL GRASSY FIELD, SUNNY HIGH 50'S |
| | | | | | | | | | SOIL DESCRIPTION |
| 957 | 13 | 10 | 1 | 1 | 10-10-6 | 0 | X | MH | MODERATE BROWN (5YR4/4), S. MOIST, CLAYEY SILT, MICACEOUS SOME GRAVEL @ TOP, VERY STIFF |
| 957 | 13 | 10 | 2 | 5 | 1-1-2 | 0 | X | MH | MODERATE BROWN (5YR4/4), S. MOIST, CLAYEY SILT TO SILTY CLAY, SOFT, MICACEOUS, MINOR ROCK FRAGMENTS |
| 957 | 13 | 10 | 0 | 11 | 13-01-21 | | | MC-MH | MOTTLED GREENISH GRAY (5YR4/4), S. MOIST, CLAYEY SILT TO SILTY CLAY, S. MOIST, SILTY FINE SAND WITH LITTLE CLAY, SOFT, MICACEOUS TEXTURE, MICACEOUS, HARD, EFFULGENT |
| | | | | | | | | | COMPETENT BEDROCK (FELTIC SCHIST) |
| 957 | | | | | 51 | | | | NO SAMPLE RECOVERED, AUGER REFUSED @ 13', JETTED HOLE 14', AUGER REFUSED @ 13', CHANGE TO LARGER AUGER 14", 14" AUGER, LARGER AUGER TO 15', LEAVE IN HOLE AND CHANGE TO ROLLER BIT, ROLLER BIT TO 21' |
| | | | | | | | | | INSTALL MONITORING WELL 4-14-69 NO. 10 SLO. 4" ID PVC SCREEN 20'-10" (10') 4" PVC RISER CASING 10'-SURFACE TO 10' MOLD SAND PACK 10'-12' (2') ECONOMITE PELLETS 5'-8' (12') PORT. CEMENT GROUT 5'-SURFACE TO 10'-10" PROTECTIVE STEEL CASING |

55

GNC-7

WELL COMPLETION DIAGRAM



Gaithersburg NIKE
Control Site



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. SNC-8

Coordinates:

Geologist: M. ROMANUK

Surface Elevation: 501.49 FT.

Casing Above Surface: 2.05 FT.

Reference Elevation:

Reference Description: SFUND

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

PSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 19 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

Completion Date: 11 APRIL 1989

| TYPE | | CORR. NO. | | DEPTH | | LOG | | SURFACE CONDITIONS | |
|------|----|-----------|---|-------|----------|-----|---|--|---|
| TYPE | | CORR. NO. | | DEPTH | | LOG | | SURFACE CONDITIONS | |
| | | | | | | | | SLIGHTLY SLOPING GRASS FIELD, SUNNY LOW SW | |
| | | | | | | | | SOIL DESCRIPTION | |
| SPT | 13 | 12 | 1 | 1 | 1-3-6 | 0 | X | MH | MODERATE BROWN (5YR4/4), S. MOIST CLAYEY SILT, MEDIUM STIFF, MINOR MICA |
| SPT | 13 | 13 | 2 | 5 | 3-7-6 | 0 | X | ML | MOTTLED, LIGHT BROWN (5YR5/6) TO BLACK (M1), S. MOIST, CLAYEY SILT WITH FINE SAND, MICACEOUS, MEDIUM STIFF, SAPROLITE |
| SPT | 13 | 13 | 3 | 11 | 5-12-12 | 0 | X | ML | MOTTLED GREENISH GRAY (5GY5/1), BLACK (M1), LIGHT BROWN (5YR 5/6), S. MOIST, CLAYEY SILT WITH LITTLE FINE SAND, SCARF SCHISTOSE TEXTURE, MICACEOUS, VERY STIFF, SAPROLITE |
| SPT | 13 | 13 | 4 | 16 | 12-20-20 | 0 | X | SC | MOTTLED MODERATE YELLOW BROWN (10YR5/4), LIGHT BROWN (5YR 5/6), MOIST, CLAYEY FINE SAND WITH SILT, MICACEOUS, HARD |

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSURE SHELVY TUBE
 1ST-DETENBURG PISTON SAMPLER
 DEV-DETENBURG CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

12 LANEYEN CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

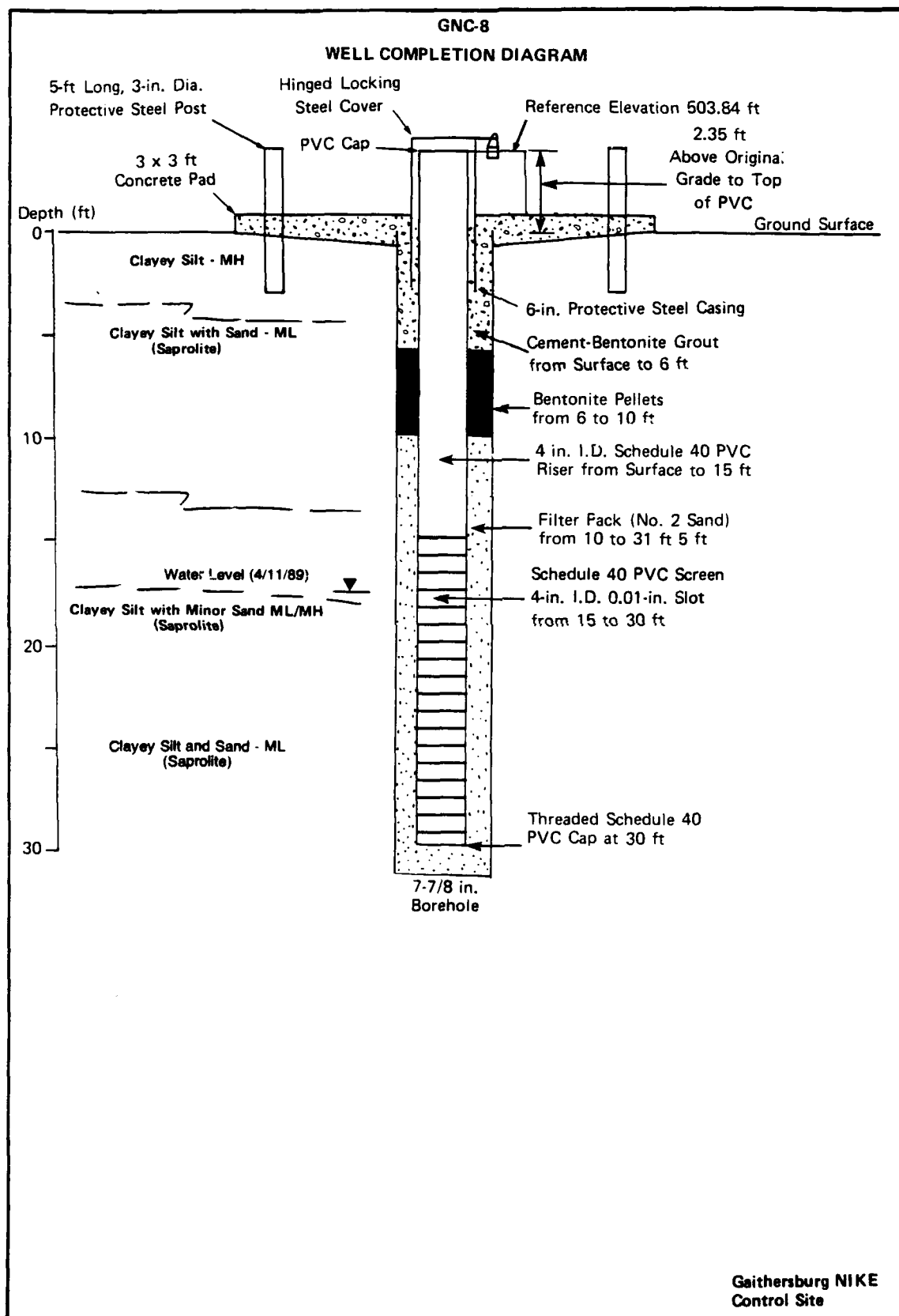
BORING NO. B-1
Coordinates: Location: GAITHERSBURG CONTROL AREA
Geologist: M. ROMANUK Job No. 10559.03
Surface Elevation: 501.49 FT. Client: USATHAMA
Casing Above Surface: 1.15 FT. Drilling Method: MOBILE B-61 DRILL PIG.
Reference Elevation: ASA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
Reference Description: GROUND Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
SPLIT SPOON, DRIVEN 19 IN. WITH 140 LB. HAMMER, 30 IN. DROP
Start Date: 11 APRIL 1989 Completion Date: 11 APRIL 1989

| DEPTH FEET | LOG | GRAIN SIZE | WATER CONTENT % | PLASTICITY INDEX | FLUIDITY CLASS | TEST DATE | TEST NO. | TEST TYPE | TEST RESULT | TEST METHOD | TEST STANDARD | TEST EQUIPMENT | TEST OPERATOR | TEST SUPERVISOR | TEST APPROVER | TEST REMARKS |
|---------------|-----|---------------|-----------------------|---------------------|-------------------|--------------|-------------|--------------|----------------|----------------|------------------|-------------------|------------------|--------------------|------------------|-----------------|
| 0 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | |

SAMPLER TYPE
SPT-DRIVEN SPLIT SPOON
SH-PRESSURE SHELVY TUBE
SPT-OSTENBURG PISTON SAMPLER
SPT-DEWISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HFS.
AFTER 24 HFS.

FT.
FT.
FT.



APPENDIX B
FIELD SAMPLING RECORDS



EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY, INC.

FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-1 Gauge Date: 5-25-89 Time: 13:49

Weather: Sunny, Low 70's

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick ~~up~~/down (ft): _____

(1) Well Depth (ft): 46.4 Purge Date: 5-25-84 Time: 13:50

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub pump

(3) Depth to Water (ft): 31.5 Purge Rate (gpm): 1.8

(4) Liquid Depth [(1)-(2)]: 14.9 Purge Time (min): 43

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 77

Did Well Pump Dry? Describe: yes, purged @ 5gpm

for 5 min. - well purged dry. Total purged 77 + 25 = 102 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: 1206

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp 15°C, SG = 90, pH = 5.70

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-2 Gauge Date: 5-25-89 Time: _____

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 37.9 Purge Date: 5-25-89 Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): 23.05 Purge Rate (gpm): see below

(4) Liquid Depth [(1)-(2)]: 14.85 Purge Time (min): 20.5

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 68.5

Did Well Pump Dry? Describe: 8.5 min @ 5gpm = 42.5 gal.

4 min. @ 2.5gpm = 10 gal., 8 min. @ 2gpm = 16 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: 1743

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp. = 15°C, SC = 45, pH = 5.25

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-3 Gauge Date: 5-25-89 Time: _____

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 46.6 Purge Date: 5-25-89 Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub pump

(3) Depth to Water (ft): 31.73 Purge Rate (gpm): See below

(4) Liquid Depth [(1)-(2)]: 14.87 Purge Time (min): 30

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 87.5

Did Well Pump Dry? Describe: 5 min @ 5 gpm = 25 gal.

well purged dry, 25 min @ 2.5 gpm = 62.5 gal

Samplers: _____

Sampling Date: 5-25-89 Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

T = 18°C, SC = 60, pH = 5.34



FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-4 Gauge Date: 5-25-89 Time: _____

Weather: partly cloudy

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 21.9 Purge Date: 5-25-89 Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): 8.55 Purge Rate (gpm): see below

(4) Liquid Depth [(1)-(2)]: 13.35 Purge Time (min): 10.5

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 65

Did Well Pump Dry? Describe: 2.5 min. @ 10 gpm = 25 gal.
8 min. @ 5 gpm = 40 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____
Temp = 17°C, SC = 50, pH = 5.70

Site: GAITHERSBURG NIKE CONTROL AREA

Well No: GNC-5 Gauge Date: 5-25-89 Time: _____

Weather: Sunny, High 60's

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: _____ Measurement Reference: _____

Stick up/down (ft): _____

(1) Well Depth (ft): _____ Purge Date: 5-25-89 Time: 845

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub pump

(3) Depth to Water (ft): _____ Purge Rate (gpm): 5 gpm

(4) Liquid Depth [(1)-(2)]: _____ Purge Time (min): 40

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 200

Did Well Pump Dry? Describe: No

Samplers: _____

Sampling Date: 5-25-89 Time: 1545

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 17°C, SC = 39, pH = 5.19

Site: GAITHERSBURG NIKE CONTROL AREA

Well No: GNC-6 Gauge Date: 5-25-89 Time: _____

Weather: Sunny, high 60's

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: _____ Measurement Reference: _____

Stick up/down (ft): _____

(1) Well Depth (ft): _____ Purge Date: _____ Time: 856

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): _____ Purge Rate (gpm): 10 gpm

(4) Liquid Depth [(1)-(2)]: _____ Purge Time (min): 50

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 500

Did Well Pump Dry? Describe: NO

Samplers: _____

Sampling Date: 5-25-89 Time: 1546

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

T = 18.5, SC = 38, pH = 5.62



EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY, INC.

FIELD RECORD OF GROUND-WATER SAMPLING

Site: CAITHERSBURG NIKE CONTROL AREA

Well No: GNC-7 Gauge Date: 5-25-89 Time: _____

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick ~~up~~ Down (ft): _____

(1) Well Depth (ft): 21.5 Purge Date: _____ Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" Bailor

(3) Depth to Water (ft): 13.5 Purge Rate (gpm): _____

(4) Liquid Depth [(1)-(2)]: 8 Purge Time (min): _____

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 26.5

Did Well Pump Dry? Describe: yes, after 10 gal.;

wait 15 min - well purged dry after 10 gal; removed
additional 6.5 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 17°C, SC = 250, pH = 5.84



EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY, INC.

FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE CONTROL AREA

Well No: GNC-8 Gauge Date: 5-25-89 Time: 1056

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick (up/down) (ft): _____

(1) Well Depth (ft): 31.35 Purge Date: 5-25-89 Time: 1056

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): 17.48 Purge Rate (gpm): 1.6 gpm

(4) Liquid Depth [(1)-(2)]: _____ Purge Time (min): 17

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 30.6

Did Well Pump Dry? Describe: yes

Samplers: _____

Sampling Date: _____ Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 16°C, SL = 149, pH = 5.74

APPENDIX C
SLUG TEST DATA

IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-7 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 33.10 (Ft)
H(0) : 6.55 (Ft)
T(0) : .03 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .0000 | DA: 1 15:08 | 39.64 | 6.54 | -.0333 | .998 |
| .0077 | 15:08 | 39.64 | 6.54 | -.0300 | .998 |
| .0088 | 15:08 | 39.64 | 6.54 | -.0267 | .998 |
| .0099 | 15:08 | 39.64 | 6.54 | -.0234 | .998 |
| .0133 | 15:08 | 39.64 | 6.54 | -.0200 | .998 |
| .0166 | 15:08 | 39.64 | 6.54 | -.0167 | .998 |
| .0200 | 15:08 | 39.64 | 6.54 | -.0133 | .998 |
| .0233 | 15:08 | 39.64 | 6.54 | -.0100 | .998 |
| .0266 | 15:08 | 39.64 | 6.54 | -.0067 | .998 |
| .0300 | 15:08 | 39.64 | 6.54 | -.0033 | .998 |
| .0333 | 15:08 | 39.65 | 6.55 | .0000 | 1.000 |
| .0500 | 15:08 | 39.62 | 6.52 | .0167 | .995 |
| .0666 | 15:08 | 39.53 | 6.43 | .0333 | .982 |
| .0833 | 15:08 | 39.45 | 6.35 | .0500 | .969 |
| .1000 | 15:08 | 39.37 | 6.27 | .0667 | .957 |
| .1166 | 15:08 | 39.29 | 6.19 | .0833 | .945 |
| .1333 | 15:08 | 39.22 | 6.12 | .1000 | .934 |
| .1500 | 15:08 | 39.13 | 6.03 | .1167 | .921 |
| .1666 | 15:08 | 39.06 | 5.96 | .1333 | .910 |
| .1833 | 15:08 | 38.97 | 5.87 | .1500 | .896 |
| .2000 | 15:08 | 38.89 | 5.79 | .1667 | .884 |
| .2166 | 15:08 | 38.82 | 5.72 | .1833 | .873 |
| .2333 | 15:08 | 38.74 | 5.64 | .2000 | .861 |
| .2500 | 15:08 | 38.67 | 5.57 | .2167 | .850 |
| .2666 | 15:08 | 38.60 | 5.50 | .2333 | .840 |
| .2833 | 15:08 | 38.54 | 5.44 | .2500 | .831 |
| .3000 | 15:08 | 38.48 | 5.38 | .2667 | .821 |
| .3166 | 15:08 | 38.43 | 5.33 | .2833 | .814 |
| .3333 | 15:08 | 38.38 | 5.28 | .3000 | .806 |
| .4167 | 15:08 | 38.15 | 5.05 | .3834 | .771 |
| .5000 | 15:08 | 37.93 | 4.83 | .4667 | .737 |
| .5833 | 15:08 | 37.71 | 4.61 | .5500 | .704 |
| .6667 | 15:08 | 37.51 | 4.41 | .6334 | .673 |
| .7500 | 15:08 | 37.29 | 4.19 | .7167 | .640 |

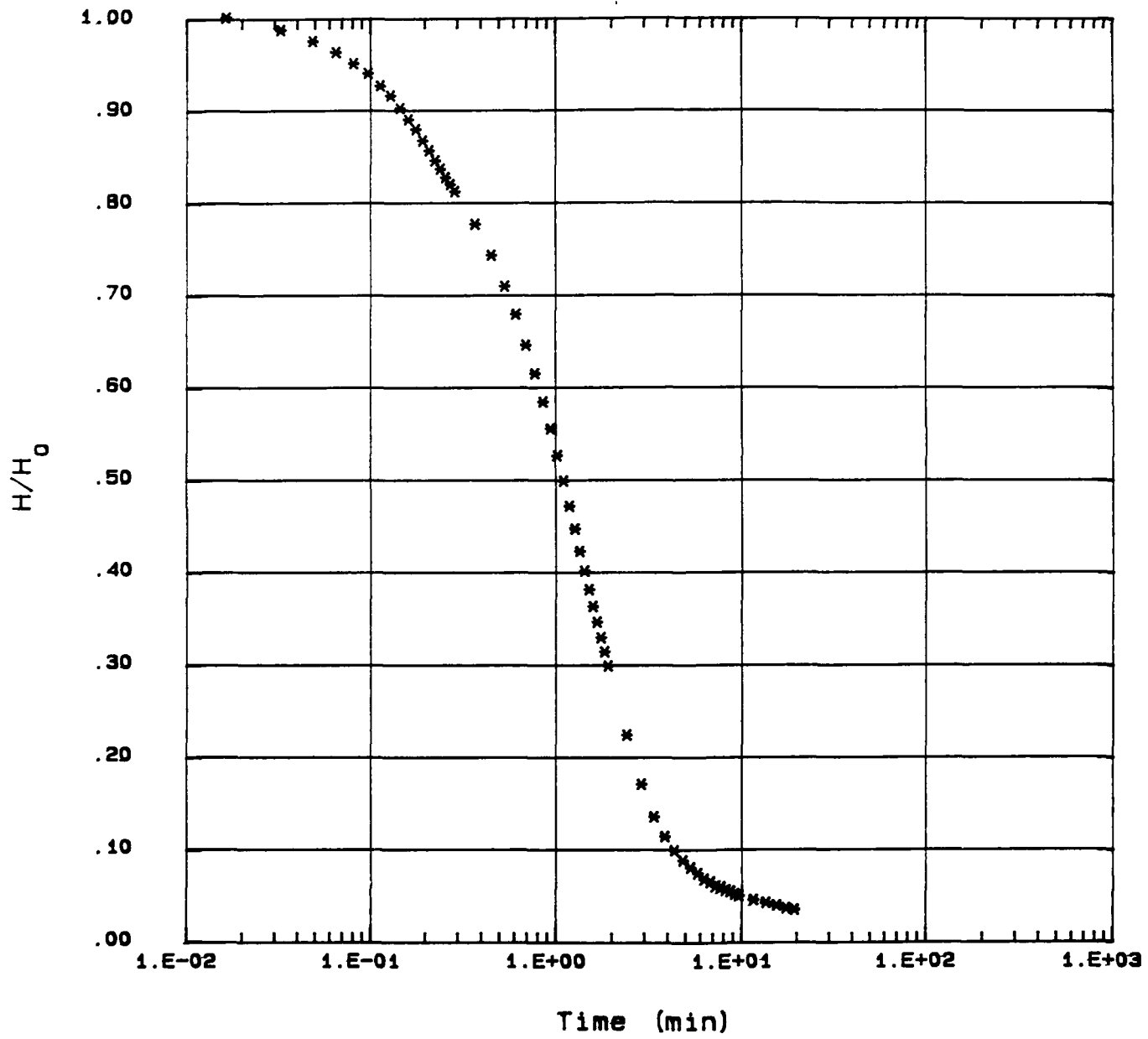
GNL-3 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 33.10 (Ft)
H(0) : 6.55 (Ft)
T(0) : .03 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .3333 | 15:08 | 37.09 | 3.99 | .8000 | .609 |
| .9167 | 15:08 | 36.89 | 3.79 | .8834 | .579 |
| 1.0000 | 15:08 | 36.70 | 3.60 | .9667 | .550 |
| 1.0833 | 15:09 | 36.51 | 3.41 | 1.0500 | .521 |
| 1.1667 | 15:09 | 36.33 | 3.23 | 1.1334 | .493 |
| 1.2500 | 15:09 | 36.15 | 3.05 | 1.2167 | .466 |
| 1.3333 | 15:09 | 35.99 | 2.89 | 1.3000 | .441 |
| 1.4166 | 15:09 | 35.83 | 2.73 | 1.3833 | .417 |
| 1.5000 | 15:09 | 35.69 | 2.59 | 1.4667 | .395 |
| 1.5833 | 15:09 | 35.56 | 2.46 | 1.5500 | .376 |
| 1.6667 | 15:09 | 35.44 | 2.34 | 1.6334 | .357 |
| 1.7500 | 15:09 | 35.33 | 2.23 | 1.7167 | .340 |
| 1.8333 | 15:09 | 35.22 | 2.12 | 1.8000 | .324 |
| 1.9167 | 15:09 | 35.12 | 2.02 | 1.8834 | .308 |
| 2.0000 | 15:09 | 35.02 | 1.92 | 1.9667 | .293 |
| 2.5000 | 15:10 | 34.53 | 1.43 | 2.4667 | .218 |
| 3.0000 | 15:10 | 34.18 | 1.08 | 2.9667 | .165 |
| 3.5000 | 15:11 | 33.95 | .85 | 3.4667 | .130 |
| 4.0000 | 15:11 | 33.81 | .71 | 3.9667 | .108 |
| 4.5000 | 15:12 | 33.71 | .61 | 4.4667 | .093 |
| 5.0000 | 15:12 | 33.64 | .54 | 4.9667 | .082 |
| 5.5000 | 15:13 | 33.59 | .49 | 5.4667 | .075 |
| 6.0000 | 15:13 | 33.55 | .45 | 5.9667 | .069 |
| 6.5000 | 15:14 | 33.51 | .41 | 6.4667 | .063 |
| 7.0000 | 15:14 | 33.49 | .39 | 6.9667 | .060 |
| 7.5000 | 15:15 | 33.46 | .36 | 7.4667 | .055 |
| 8.0000 | 15:15 | 33.45 | .35 | 7.9667 | .053 |
| 8.5000 | 15:16 | 33.43 | .33 | 8.4667 | .050 |
| 9.0000 | 15:16 | 33.42 | .32 | 8.9667 | .049 |
| 9.5000 | 15:17 | 33.40 | .30 | 9.4667 | .046 |
| 10.0000 | 15:17 | 33.39 | .29 | 9.9667 | .044 |
| 12.0000 | 15:19 | 33.36 | .26 | 11.9667 | .040 |
| 14.0000 | 15:21 | 33.34 | .24 | 13.9667 | .037 |
| 16.0000 | 15:23 | 33.32 | .22 | 15.9667 | .034 |
| 18.0000 | 15:25 | 33.30 | .20 | 17.9667 | .031 |
| 20.0000 | 15:27 | 33.29 | .19 | 19.9667 | .029 |

GNL-3 SLUG TEST 1



IN-SITU INC. PERMIT DATA MANAGEMENT PACKAGE

GNL-2 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 15.18 (Ft)
H(0) : 5.58 (Ft)
T(0) : 1.00 (Min)

| ELAPSED TIME (Min) | REAL TIME (mm:ss) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .0000 DAY | 15:35 | 40.78 | 5.58 | -.0033 | 1.000 |
| .0033 | 15:35 | 40.78 | 5.58 | .0000 | 1.000 |
| .0066 | 15:35 | 40.73 | 5.55 | .0033 | .995 |
| .0099 | 15:35 | 40.72 | 5.54 | .0066 | .993 |
| .0133 | 15:35 | 40.71 | 5.53 | .0100 | .991 |
| .0166 | 15:35 | 40.69 | 5.51 | .0133 | .987 |
| .0200 | 15:35 | 40.69 | 5.51 | .0167 | .987 |
| .0233 | 15:35 | 40.66 | 5.48 | .0200 | .982 |
| .0266 | 15:35 | 40.65 | 5.47 | .0233 | .980 |
| .0300 | 15:35 | 40.63 | 5.45 | .0267 | .977 |
| .0333 | 15:35 | 40.62 | 5.44 | .0300 | .975 |
| .0500 | 15:35 | 40.55 | 5.37 | .0467 | .962 |
| .0666 | 15:35 | 40.49 | 5.31 | .0633 | .952 |
| .0833 | 15:35 | 40.44 | 5.26 | .0800 | .943 |
| .1000 | 15:35 | 40.39 | 5.21 | .0967 | .934 |
| .1166 | 15:35 | 40.36 | 5.18 | .1133 | .928 |
| .1333 | 15:35 | 40.30 | 5.12 | .1300 | .918 |
| .1500 | 15:35 | 40.25 | 5.07 | .1467 | .909 |
| .1666 | 15:35 | 40.22 | 5.04 | .1633 | .903 |
| .1833 | 15:35 | 40.18 | 5.00 | .1800 | .896 |
| .2000 | 15:35 | 40.14 | 4.96 | .1967 | .889 |
| .2166 | 15:35 | 40.11 | 4.93 | .2133 | .884 |
| .2333 | 15:35 | 40.07 | 4.89 | .2300 | .876 |
| .2500 | 15:35 | 40.03 | 4.85 | .2467 | .869 |
| .2666 | 15:35 | 39.99 | 4.81 | .2633 | .862 |
| .2833 | 15:35 | 39.95 | 4.77 | .2800 | .855 |
| .3000 | 15:35 | 39.91 | 4.73 | .2967 | .848 |
| .3166 | 15:35 | 39.87 | 4.69 | .3133 | .841 |
| .3333 | 15:35 | 39.83 | 4.65 | .3300 | .833 |
| .4167 | 15:35 | 39.65 | 4.47 | .4134 | .801 |
| .5000 | 15:35 | 39.46 | 4.28 | .4967 | .767 |
| .5833 | 15:35 | 39.28 | 4.10 | .5800 | .735 |
| .6667 | 15:35 | 39.10 | 3.92 | .6634 | .703 |
| .7500 | 15:35 | 38.92 | 3.74 | .7467 | .670 |

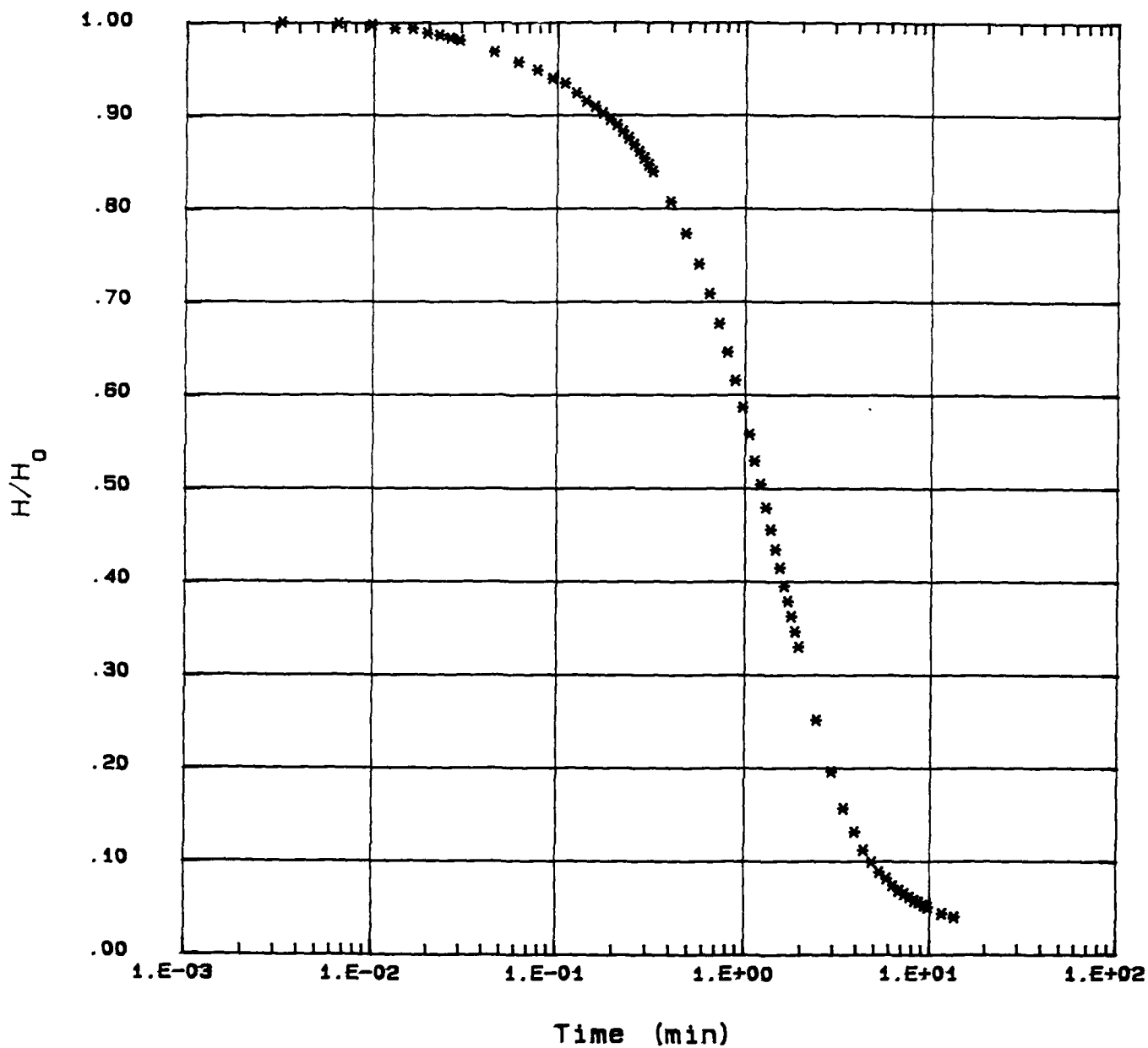
GNL-3 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 35.18 (Ft)
H(O) : 5.58 (Ft)
T(O) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(O) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .3333 | 15:35 | 38.75 | 3.57 | .8300 | .540 |
| .9167 | 15:35 | 38.58 | 3.40 | .9134 | .509 |
| 1.0000 | 15:35 | 38.42 | 3.24 | .9967 | .581 |
| 1.0833 | 15:36 | 38.26 | 3.08 | 1.0800 | .552 |
| 1.1667 | 15:36 | 38.10 | 2.92 | 1.1634 | .523 |
| 1.2500 | 15:36 | 37.96 | 2.76 | 1.2467 | .498 |
| 1.3333 | 15:36 | 37.82 | 2.64 | 1.3300 | .473 |
| 1.4166 | 15:36 | 37.69 | 2.51 | 1.4133 | .450 |
| 1.5000 | 15:36 | 37.57 | 2.39 | 1.4967 | .428 |
| 1.5833 | 15:36 | 37.46 | 2.28 | 1.5800 | .409 |
| 1.6667 | 15:36 | 37.35 | 2.17 | 1.6634 | .389 |
| 1.7500 | 15:36 | 37.26 | 2.08 | 1.7467 | .373 |
| 1.8333 | 15:36 | 37.17 | 1.99 | 1.8300 | .357 |
| 1.9167 | 15:36 | 37.08 | 1.90 | 1.9134 | .341 |
| 2.0000 | 15:36 | 36.99 | 1.81 | 1.9967 | .324 |
| 2.5000 | 15:37 | 36.55 | 1.37 | 2.4967 | .246 |
| 3.0000 | 15:37 | 36.24 | 1.06 | 2.9967 | .190 |
| 3.5000 | 15:38 | 36.02 | .84 | 3.4967 | .151 |
| 4.0000 | 15:38 | 35.88 | .70 | 3.9967 | .125 |
| 4.5000 | 15:39 | 35.77 | .59 | 4.4967 | .106 |
| 5.0000 | 15:39 | 35.70 | .52 | 4.9967 | .093 |
| 5.5000 | 15:40 | 35.64 | .46 | 5.4967 | .082 |
| 6.0000 | 15:40 | 35.60 | .42 | 5.9967 | .075 |
| 6.5000 | 15:41 | 35.56 | .38 | 6.4967 | .068 |
| 7.0000 | 15:41 | 35.53 | .35 | 6.9967 | .063 |
| 7.5000 | 15:42 | 35.51 | .33 | 7.4967 | .059 |
| 8.0000 | 15:42 | 35.49 | .31 | 7.9967 | .056 |
| 8.5000 | 15:43 | 35.47 | .29 | 8.4967 | .052 |
| 9.0000 | 15:43 | 35.46 | .28 | 8.9967 | .050 |
| 9.5000 | 15:44 | 35.44 | .26 | 9.4967 | .047 |
| 10.0000 | 15:44 | 35.43 | .25 | 9.9967 | .045 |
| 12.0000 | 15:46 | 35.39 | .21 | 11.9967 | .038 |
| 14.0000 | 15:48 | 35.37 | .19 | 13.9967 | .034 |

GNL-3 SLUG TEST 2



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

3NL-4 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
 H(0) : 3.19 (Ft)
 T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .0000 | DAY 1 13:29 | 12.64 | 3.19 | .0000 | 1.000 |
| .0033 | 13:29 | 12.63 | 3.18 | .0033 | .997 |
| .0066 | 13:29 | 12.60 | 3.15 | .0066 | .987 |
| .0099 | 13:29 | 12.58 | 3.13 | .0099 | .981 |
| .0133 | 13:29 | 12.56 | 3.11 | .0133 | .975 |
| .0166 | 13:29 | 12.54 | 3.09 | .0166 | .969 |
| .0200 | 13:29 | 12.52 | 3.07 | .0200 | .962 |
| .0233 | 13:29 | 12.49 | 3.04 | .0233 | .953 |
| .0266 | 13:29 | 12.48 | 3.03 | .0266 | .950 |
| .0300 | 13:29 | 12.46 | 3.01 | .0300 | .944 |
| .0333 | 13:29 | 12.43 | 2.98 | .0333 | .934 |
| .0500 | 13:29 | 12.34 | 2.89 | .0500 | .906 |
| .0666 | 13:29 | 12.26 | 2.81 | .0666 | .881 |
| .0833 | 13:29 | 12.19 | 2.74 | .0833 | .859 |
| .1000 | 13:29 | 12.12 | 2.67 | .1000 | .837 |
| .1166 | 13:29 | 12.06 | 2.61 | .1166 | .818 |
| .1333 | 13:29 | 12.00 | 2.55 | .1333 | .799 |
| .1500 | 13:29 | 11.95 | 2.50 | .1500 | .784 |
| .1666 | 13:29 | 11.90 | 2.45 | .1666 | .768 |
| .1833 | 13:29 | 11.85 | 2.40 | .1833 | .752 |
| .2000 | 13:29 | 11.81 | 2.36 | .2000 | .740 |
| .2166 | 13:29 | 11.77 | 2.32 | .2166 | .727 |
| .2333 | 13:29 | 11.73 | 2.28 | .2333 | .715 |
| .2500 | 13:29 | 11.70 | 2.25 | .2500 | .705 |
| .2666 | 13:29 | 11.66 | 2.21 | .2666 | .693 |
| .2833 | 13:29 | 11.63 | 2.18 | .2833 | .683 |
| .3000 | 13:29 | 11.60 | 2.15 | .3000 | .674 |
| .3166 | 13:29 | 11.57 | 2.12 | .3166 | .665 |
| .3333 | 13:29 | 11.54 | 2.09 | .3333 | .655 |
| .4167 | 13:29 | 11.39 | 1.94 | .4167 | .608 |
| .5000 | 13:29 | 11.24 | 1.79 | .5000 | .561 |
| .5833 | 13:29 | 11.09 | 1.64 | .5833 | .514 |
| .6667 | 13:29 | 10.96 | 1.51 | .6667 | .473 |
| .7500 | 13:29 | 10.82 | 1.37 | .7500 | .429 |

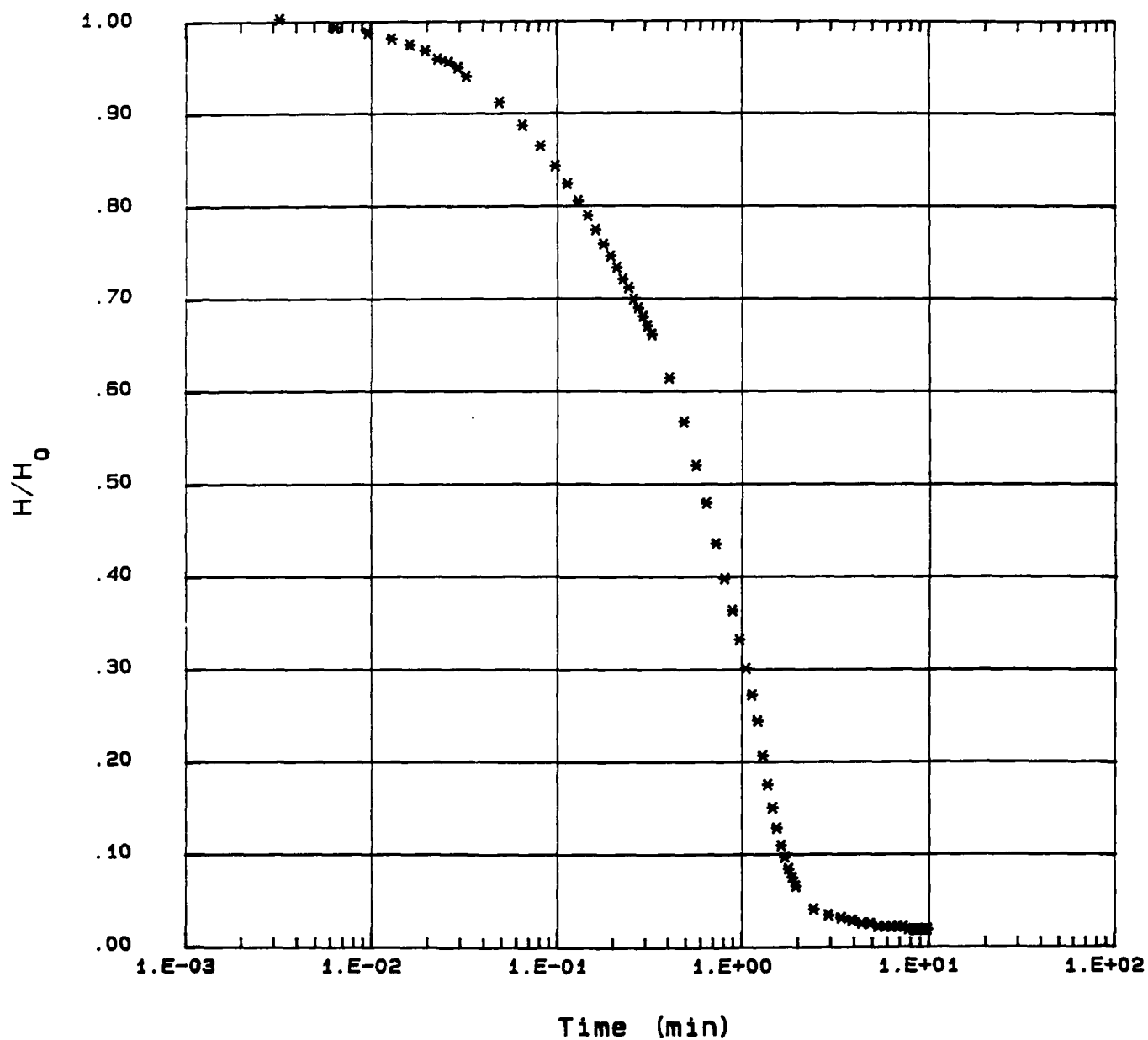
GNL-4 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
H(0) : 3.19 (Ft)
T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .8333 | 13:29 | 10.70 | 1.25 | .8333 | .392 |
| .9167 | 13:29 | 10.59 | 1.14 | .9167 | .337 |
| 1.0000 | 13:30 | 10.49 | 1.04 | 1.0000 | .326 |
| 1.0833 | 13:30 | 10.39 | .94 | 1.0833 | .295 |
| 1.1667 | 13:30 | 10.30 | .85 | 1.1667 | .266 |
| 1.2500 | 13:30 | 10.21 | .76 | 1.2500 | .238 |
| 1.3333 | 13:30 | 10.09 | .64 | 1.3333 | .201 |
| 1.4166 | 13:30 | 9.99 | .54 | 1.4166 | .169 |
| 1.5000 | 13:30 | 9.91 | .46 | 1.5000 | .144 |
| 1.5833 | 13:30 | 9.84 | .39 | 1.5833 | .122 |
| 1.6667 | 13:30 | 9.78 | .33 | 1.6667 | .103 |
| 1.7500 | 13:30 | 9.74 | .29 | 1.7500 | .091 |
| 1.8333 | 13:30 | 9.70 | .25 | 1.8333 | .078 |
| 1.9167 | 13:30 | 9.67 | .22 | 1.9167 | .069 |
| 2.0000 | 13:31 | 9.64 | .19 | 2.0000 | .060 |
| 2.5000 | 13:31 | 9.56 | .11 | 2.5000 | .034 |
| 3.0000 | 13:32 | 9.54 | .09 | 3.0000 | .028 |
| 3.5000 | 13:32 | 9.53 | .08 | 3.5000 | .025 |
| 4.0000 | 13:33 | 9.52 | .07 | 4.0000 | .022 |
| 4.5000 | 13:33 | 9.51 | .06 | 4.5000 | .019 |
| 5.0000 | 13:34 | 9.51 | .06 | 5.0000 | .019 |
| 5.5000 | 13:34 | 9.50 | .05 | 5.5000 | .016 |
| 6.0000 | 13:35 | 9.50 | .05 | 6.0000 | .016 |
| 6.5000 | 13:35 | 9.50 | .05 | 6.5000 | .016 |
| 7.0000 | 13:36 | 9.50 | .05 | 7.0000 | .016 |
| 7.5000 | 13:36 | 9.50 | .05 | 7.5000 | .016 |
| 8.0000 | 13:37 | 9.49 | .04 | 8.0000 | .013 |
| 8.5000 | 13:37 | 9.49 | .04 | 8.5000 | .013 |
| 9.0000 | 13:38 | 9.49 | .04 | 9.0000 | .013 |
| 9.5000 | 13:38 | 9.49 | .04 | 9.5000 | .013 |
| 10.0000 | 13:39 | 9.49 | .04 | 10.0000 | .013 |

GNL-4 SLUG TEST 1



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-4 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
H(0) : 3.37 (Ft)
T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .0000 | Day 1 13:43 | 12.82 | 3.37 | .0000 | 1.000 |
| .0033 | 13:43 | 12.80 | 3.35 | .0033 | .994 |
| .0066 | 13:43 | 12.78 | 3.33 | .0066 | .988 |
| .0099 | 13:43 | 12.76 | 3.31 | .0099 | .982 |
| .0133 | 13:43 | 12.74 | 3.29 | .0133 | .976 |
| .0166 | 13:43 | 12.72 | 3.27 | .0166 | .970 |
| .0200 | 13:43 | 12.71 | 3.26 | .0200 | .967 |
| .0233 | 13:43 | 12.69 | 3.24 | .0233 | .961 |
| .0266 | 13:43 | 12.67 | 3.22 | .0266 | .955 |
| .0300 | 13:43 | 12.66 | 3.21 | .0300 | .953 |
| .0333 | 13:43 | 12.64 | 3.19 | .0333 | .947 |
| .0500 | 13:43 | 12.56 | 3.11 | .0500 | .923 |
| .0666 | 13:43 | 12.49 | 3.04 | .0666 | .902 |
| .0833 | 13:43 | 12.41 | 2.96 | .0833 | .878 |
| .1000 | 13:43 | 12.34 | 2.89 | .1000 | .858 |
| .1166 | 13:43 | 12.27 | 2.82 | .1166 | .837 |
| .1333 | 13:43 | 12.20 | 2.75 | .1333 | .816 |
| .1500 | 13:43 | 12.13 | 2.68 | .1500 | .795 |
| .1666 | 13:43 | 12.07 | 2.62 | .1666 | .777 |
| .1833 | 13:43 | 12.01 | 2.56 | .1833 | .760 |
| .2000 | 13:43 | 11.96 | 2.51 | .2000 | .745 |
| .2166 | 13:43 | 11.91 | 2.46 | .2166 | .730 |
| .2333 | 13:43 | 11.86 | 2.41 | .2333 | .715 |
| .2500 | 13:43 | 11.82 | 2.37 | .2500 | .703 |
| .2666 | 13:43 | 11.78 | 2.33 | .2666 | .691 |
| .2833 | 13:43 | 11.75 | 2.30 | .2833 | .682 |
| .3000 | 13:43 | 11.71 | 2.26 | .3000 | .671 |
| .3166 | 13:43 | 11.68 | 2.23 | .3166 | .662 |
| .3333 | 13:43 | 11.65 | 2.20 | .3333 | .653 |
| .4167 | 13:43 | 11.50 | 2.05 | .4167 | .608 |
| .5000 | 13:43 | 11.35 | 1.90 | .5000 | .564 |
| .5833 | 13:43 | 11.21 | 1.76 | .5833 | .522 |
| .6667 | 13:43 | 11.07 | 1.62 | .6667 | .481 |
| .7500 | 13:43 | 10.94 | 1.49 | .7500 | .442 |

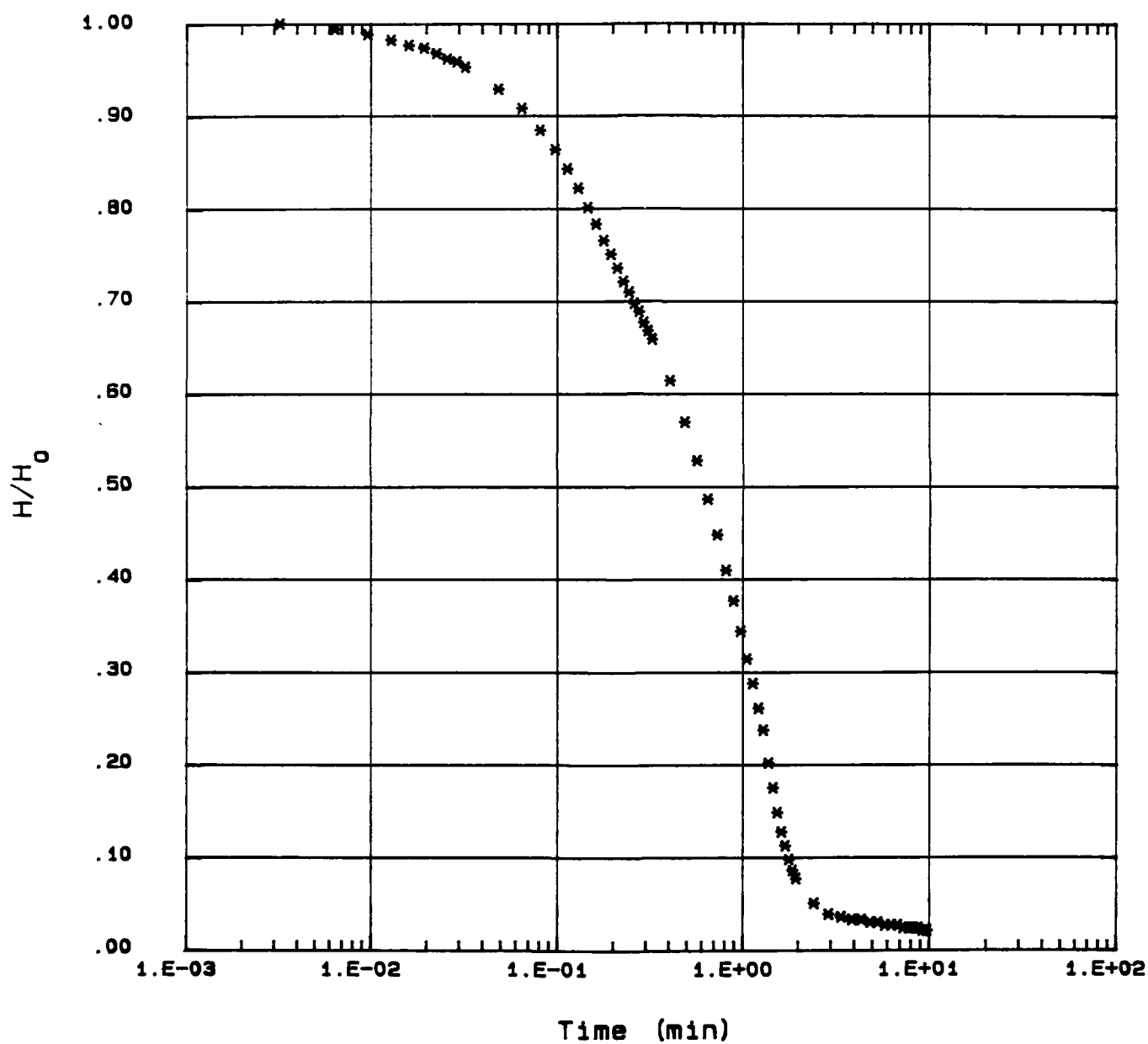
GNL-4 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
H(O) : 3.37 (Ft)
T(O) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(O) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .8333 | 13:43 | 10.81 | 1.36 | .8333 | .404 |
| .9167 | 13:43 | 10.70 | 1.25 | .9167 | .371 |
| 1.0000 | 13:44 | 10.59 | 1.14 | 1.0000 | .338 |
| 1.0833 | 13:44 | 10.49 | 1.04 | 1.0833 | .309 |
| 1.1667 | 13:44 | 10.40 | .95 | 1.1667 | .282 |
| 1.2500 | 13:44 | 10.31 | .86 | 1.2500 | .255 |
| 1.3333 | 13:44 | 10.23 | .78 | 1.3333 | .231 |
| 1.4166 | 13:44 | 10.11 | .66 | 1.4166 | .196 |
| 1.5000 | 13:44 | 10.02 | .57 | 1.5000 | .169 |
| 1.5833 | 13:44 | 9.93 | .48 | 1.5833 | .142 |
| 1.6667 | 13:44 | 9.86 | .41 | 1.6667 | .122 |
| 1.7500 | 13:44 | 9.81 | .36 | 1.7500 | .107 |
| 1.8333 | 13:44 | 9.76 | .31 | 1.8333 | .092 |
| 1.9167 | 13:44 | 9.72 | .27 | 1.9167 | .080 |
| 2.0000 | 13:45 | 9.69 | .24 | 2.0000 | .071 |
| 2.5000 | 13:45 | 9.60 | .15 | 2.5000 | .045 |
| 3.0000 | 13:46 | 9.56 | .11 | 3.0000 | .033 |
| 3.5000 | 13:46 | 9.55 | .10 | 3.5000 | .030 |
| 4.0000 | 13:47 | 9.54 | .09 | 4.0000 | .027 |
| 4.5000 | 13:47 | 9.54 | .09 | 4.5000 | .027 |
| 5.0000 | 13:48 | 9.53 | .08 | 5.0000 | .024 |
| 5.5000 | 13:48 | 9.53 | .08 | 5.5000 | .024 |
| 6.0000 | 13:49 | 9.52 | .07 | 6.0000 | .021 |
| 6.5000 | 13:49 | 9.52 | .07 | 6.5000 | .021 |
| 7.0000 | 13:50 | 9.52 | .07 | 7.0000 | .021 |
| 7.5000 | 13:50 | 9.51 | .06 | 7.5000 | .018 |
| 8.0000 | 13:51 | 9.51 | .06 | 8.0000 | .018 |
| 8.5000 | 13:51 | 9.51 | .06 | 8.5000 | .018 |
| 9.0000 | 13:52 | 9.51 | .06 | 9.0000 | .018 |
| 9.5000 | 13:52 | 9.50 | .05 | 9.5000 | .015 |
| 10.0000 | 13:53 | 9.50 | .05 | 10.0000 | .015 |

GNL-4 SLUG TEST 2



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNC-6 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 34.47 (Ft)
 H(0) : 3.44 (Ft)
 T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| .0000 | DAY 1 11:34 | 37.91 | 3.44 | .0000 | 1.000 |
| .0033 | 11:34 | 37.80 | 3.33 | .0033 | .968 |
| .0066 | 11:34 | 37.79 | 3.32 | .0066 | .965 |
| .0099 | 11:34 | 37.75 | 3.28 | .0099 | .953 |
| .0133 | 11:34 | 37.74 | 3.27 | .0133 | .951 |
| .0166 | 11:34 | 37.70 | 3.23 | .0166 | .939 |
| .0200 | 11:34 | 37.65 | 3.18 | .0200 | .924 |
| .0233 | 11:34 | 37.65 | 3.18 | .0233 | .924 |
| .0266 | 11:34 | 37.61 | 3.14 | .0266 | .913 |
| .0300 | 11:34 | 37.57 | 3.10 | .0300 | .901 |
| .0333 | 11:34 | 37.55 | 3.08 | .0333 | .895 |
| .0500 | 11:34 | 37.41 | 2.94 | .0500 | .855 |
| .0666 | 11:34 | 37.28 | 2.81 | .0666 | .817 |
| .0833 | 11:34 | 37.16 | 2.69 | .0833 | .782 |
| .1000 | 11:34 | 37.04 | 2.57 | .1000 | .747 |
| .1166 | 11:34 | 36.94 | 2.47 | .1166 | .718 |
| .1333 | 11:34 | 36.84 | 2.37 | .1333 | .689 |
| .1500 | 11:34 | 36.75 | 2.28 | .1500 | .663 |
| .1666 | 11:34 | 36.66 | 2.19 | .1666 | .637 |
| .1833 | 11:34 | 36.58 | 2.11 | .1833 | .613 |
| .2000 | 11:34 | 36.49 | 2.02 | .2000 | .587 |
| .2166 | 11:34 | 36.42 | 1.95 | .2166 | .567 |
| .2333 | 11:34 | 36.36 | 1.89 | .2333 | .549 |
| .2500 | 11:34 | 36.30 | 1.83 | .2500 | .532 |
| .2666 | 11:34 | 36.24 | 1.77 | .2666 | .515 |
| .2833 | 11:34 | 36.18 | 1.71 | .2833 | .497 |
| .3000 | 11:34 | 36.13 | 1.66 | .3000 | .483 |
| .3166 | 11:34 | 36.08 | 1.61 | .3166 | .468 |
| .3333 | 11:34 | 36.04 | 1.57 | .3333 | .456 |
| .4167 | 11:34 | 35.85 | 1.38 | .4167 | .401 |
| .5000 | 11:34 | 35.71 | 1.24 | .5000 | .360 |
| .5833 | 11:34 | 35.60 | 1.13 | .5833 | .328 |
| .6667 | 11:34 | 35.52 | 1.05 | .6667 | .305 |
| .7500 | 11:34 | 35.46 | .99 | .7500 | .288 |

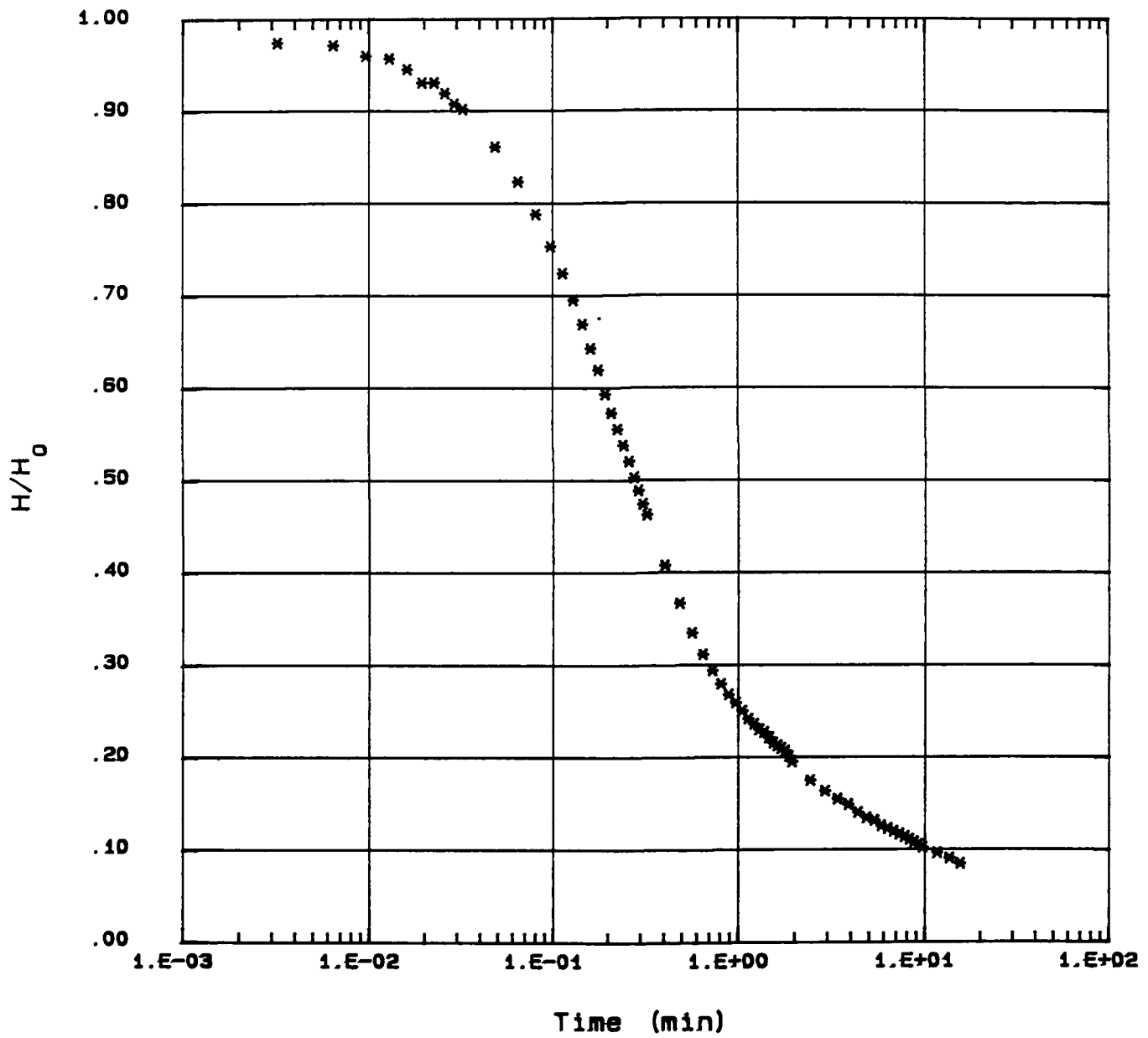
GNC-6 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 34.47 (Ft)
H(0) : 3.44 (Ft)
T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .8333 | 11:34 | 35.41 | .94 | .8333 | .273 |
| .9167 | 11:34 | 35.37 | .90 | .9167 | .262 |
| 1.0000 | 11:35 | 35.34 | .87 | 1.0000 | .253 |
| 1.0833 | 11:35 | 35.31 | .84 | 1.0833 | .244 |
| 1.1667 | 11:35 | 35.28 | .81 | 1.1667 | .235 |
| 1.2500 | 11:35 | 35.26 | .79 | 1.2500 | .230 |
| 1.3333 | 11:35 | 35.24 | .77 | 1.3333 | .224 |
| 1.4166 | 11:35 | 35.23 | .76 | 1.4166 | .221 |
| 1.5000 | 11:35 | 35.21 | .74 | 1.5000 | .215 |
| 1.5833 | 11:35 | 35.19 | .72 | 1.5833 | .209 |
| 1.6667 | 11:35 | 35.18 | .71 | 1.6667 | .206 |
| 1.7500 | 11:35 | 35.17 | .70 | 1.7500 | .203 |
| 1.8333 | 11:35 | 35.16 | .69 | 1.8333 | .201 |
| 1.9167 | 11:35 | 35.14 | .67 | 1.9167 | .195 |
| 2.0000 | 11:36 | 35.12 | .65 | 2.0000 | .189 |
| 2.5000 | 11:36 | 35.05 | .58 | 2.5000 | .169 |
| 3.0000 | 11:37 | 35.01 | .54 | 3.0000 | .157 |
| 3.5000 | 11:37 | 34.98 | .51 | 3.5000 | .148 |
| 4.0000 | 11:38 | 34.96 | .49 | 4.0000 | .142 |
| 4.5000 | 11:38 | 34.93 | .46 | 4.5000 | .134 |
| 5.0000 | 11:39 | 34.91 | .44 | 5.0000 | .128 |
| 5.5000 | 11:39 | 34.90 | .43 | 5.5000 | .125 |
| 6.0000 | 11:40 | 34.88 | .41 | 6.0000 | .119 |
| 6.5000 | 11:40 | 34.87 | .40 | 6.5000 | .116 |
| 7.0000 | 11:41 | 34.86 | .39 | 7.0000 | .113 |
| 7.5000 | 11:41 | 34.85 | .38 | 7.5000 | .110 |
| 8.0000 | 11:42 | 34.84 | .37 | 8.0000 | .108 |
| 8.5000 | 11:42 | 34.83 | .36 | 8.5000 | .105 |
| 9.0000 | 11:43 | 34.82 | .35 | 9.0000 | .102 |
| 9.5000 | 11:43 | 34.81 | .34 | 9.5000 | .099 |
| 10.0000 | 11:44 | 34.80 | .33 | 10.0000 | .096 |
| 12.0000 | 11:46 | 34.78 | .31 | 12.0000 | .090 |
| 14.0000 | 11:48 | 34.76 | .29 | 14.0000 | .084 |
| 16.0000 | 11:50 | 34.74 | .27 | 16.0000 | .078 |

GNL-6 SLUG TEST 1



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-6 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 37.85 (Ft)
H(0) : 3.12 (Ft)
T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .0000 | DAY 1 12:01 | 40.97 | 3.12 | .0000 | 1.000 |
| .0033 | 12:01 | 40.94 | 3.09 | .0033 | .990 |
| .0066 | 12:01 | 40.91 | 3.06 | .0066 | .981 |
| .0099 | 12:01 | 40.88 | 3.03 | .0099 | .971 |
| .0133 | 12:01 | 40.86 | 3.01 | .0133 | .965 |
| .0166 | 12:01 | 40.83 | 2.98 | .0166 | .955 |
| .0200 | 12:01 | 40.79 | 2.94 | .0200 | .942 |
| .0233 | 12:01 | 40.76 | 2.91 | .0233 | .933 |
| .0266 | 12:01 | 40.74 | 2.89 | .0266 | .926 |
| .0300 | 12:01 | 40.71 | 2.86 | .0300 | .917 |
| .0333 | 12:01 | 40.69 | 2.84 | .0333 | .910 |
| .0500 | 12:01 | 40.56 | 2.71 | .0500 | .869 |
| .0666 | 12:01 | 40.44 | 2.59 | .0666 | .830 |
| .0833 | 12:01 | 40.33 | 2.48 | .0833 | .795 |
| .1000 | 12:01 | 40.22 | 2.37 | .1000 | .760 |
| .1166 | 12:01 | 40.12 | 2.27 | .1166 | .728 |
| .1333 | 12:01 | 40.03 | 2.18 | .1333 | .699 |
| .1500 | 12:01 | 39.95 | 2.10 | .1500 | .673 |
| .1666 | 12:01 | 39.86 | 2.01 | .1666 | .644 |
| .1833 | 12:01 | 39.79 | 1.94 | .1833 | .622 |
| .2000 | 12:01 | 39.71 | 1.86 | .2000 | .596 |
| .2166 | 12:01 | 39.65 | 1.80 | .2166 | .577 |
| .2333 | 12:01 | 39.58 | 1.73 | .2333 | .554 |
| .2500 | 12:01 | 39.52 | 1.67 | .2500 | .535 |
| .2666 | 12:01 | 39.46 | 1.61 | .2666 | .516 |
| .2833 | 12:01 | 39.41 | 1.56 | .2833 | .500 |
| .3000 | 12:01 | 39.36 | 1.51 | .3000 | .484 |
| .3166 | 12:01 | 39.32 | 1.47 | .3166 | .471 |
| .3333 | 12:01 | 39.27 | 1.42 | .3333 | .455 |
| .4167 | 12:01 | 39.10 | 1.25 | .4167 | .401 |
| .5000 | 12:01 | 38.97 | 1.12 | .5000 | .359 |
| .5833 | 12:01 | 38.87 | 1.02 | .5833 | .327 |
| .6667 | 12:01 | 38.79 | .94 | .6667 | .301 |
| .7500 | 12:01 | 38.73 | .88 | .7500 | .282 |

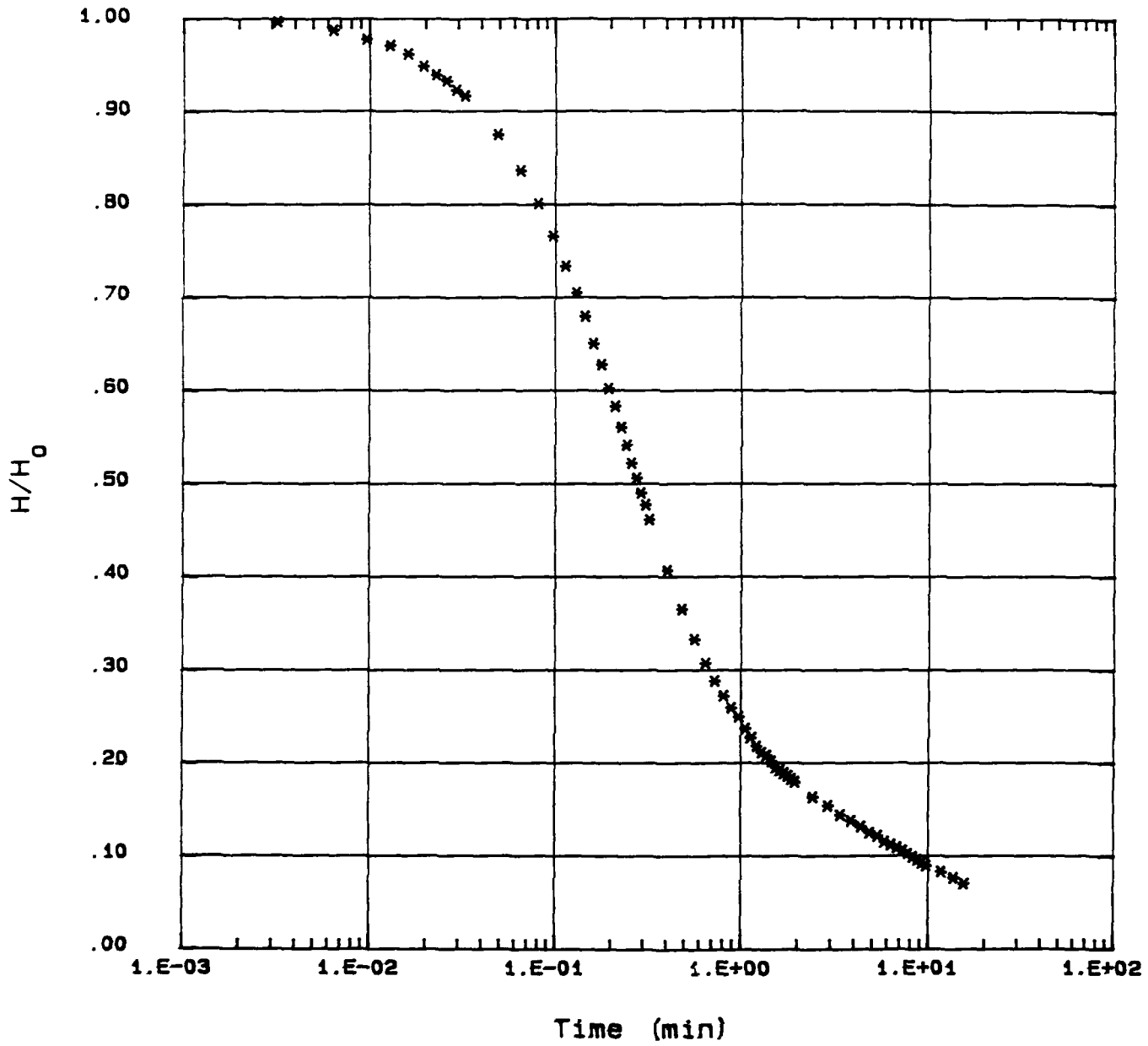
GNL-6 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 37.85 (Ft)
H(0) : 3.12 (Ft)
T(0) : .00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .8333 | 12:01 | 38.68 | .83 | .8333 | .266 |
| .9167 | 12:01 | 38.64 | .79 | .9167 | .253 |
| 1.0000 | 12:02 | 38.61 | .76 | 1.0000 | .244 |
| 1.0833 | 12:02 | 38.57 | .72 | 1.0833 | .231 |
| 1.1667 | 12:02 | 38.54 | .69 | 1.1667 | .221 |
| 1.2500 | 12:02 | 38.51 | .66 | 1.2500 | .212 |
| 1.3333 | 12:02 | 38.49 | .64 | 1.3333 | .205 |
| 1.4166 | 12:02 | 38.48 | .63 | 1.4166 | .202 |
| 1.5000 | 12:02 | 38.46 | .61 | 1.5000 | .196 |
| 1.5833 | 12:02 | 38.44 | .59 | 1.5833 | .189 |
| 1.6667 | 12:02 | 38.43 | .58 | 1.6667 | .186 |
| 1.7500 | 12:02 | 38.42 | .57 | 1.7500 | .183 |
| 1.8333 | 12:02 | 38.41 | .56 | 1.8333 | .179 |
| 1.9167 | 12:02 | 38.40 | .55 | 1.9167 | .176 |
| 2.0000 | 12:03 | 38.39 | .54 | 2.0000 | .173 |
| 2.5000 | 12:03 | 38.34 | .49 | 2.5000 | .157 |
| 3.0000 | 12:04 | 38.31 | .46 | 3.0000 | .147 |
| 3.5000 | 12:04 | 38.28 | .43 | 3.5000 | .138 |
| 4.0000 | 12:05 | 38.26 | .41 | 4.0000 | .131 |
| 4.5000 | 12:05 | 38.24 | .39 | 4.5000 | .125 |
| 5.0000 | 12:06 | 38.22 | .37 | 5.0000 | .119 |
| 5.5000 | 12:06 | 38.21 | .36 | 5.5000 | .115 |
| 6.0000 | 12:07 | 38.19 | .34 | 6.0000 | .109 |
| 6.5000 | 12:07 | 38.18 | .33 | 6.5000 | .106 |
| 7.0000 | 12:08 | 38.17 | .32 | 7.0000 | .103 |
| 7.5000 | 12:08 | 38.16 | .31 | 7.5000 | .099 |
| 8.0000 | 12:09 | 38.15 | .30 | 8.0000 | .096 |
| 8.5000 | 12:09 | 38.14 | .29 | 8.5000 | .093 |
| 9.0000 | 12:10 | 38.13 | .28 | 9.0000 | .090 |
| 9.5000 | 12:10 | 38.12 | .27 | 9.5000 | .087 |
| 10.0000 | 12:11 | 38.11 | .26 | 10.0000 | .083 |
| 12.0000 | 12:13 | 38.09 | .24 | 12.0000 | .077 |
| 14.0000 | 12:15 | 38.07 | .22 | 14.0000 | .071 |
| 16.0000 | 12:17 | 38.05 | .20 | 16.0000 | .064 |

GNL-6 SLUG TEST 2



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-B SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 20.04 (Ft)
H(O) : 5.04 (Ft)
T(O) : .01 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(O) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .0000 | DAY 1 13:08 | 26.08 | 6.04 | -.0066 | 1.000 |
| .0033 | 13:08 | 26.07 | 6.03 | -.0033 | .998 |
| .0066 | 13:08 | 26.08 | 6.04 | .0000 | 1.000 |
| .0099 | 13:08 | 26.06 | 6.02 | .0033 | .997 |
| .0133 | 13:08 | 26.04 | 6.00 | .0067 | .993 |
| .0166 | 13:08 | 26.03 | 5.99 | .0100 | .992 |
| .0200 | 13:08 | 26.02 | 5.98 | .0134 | .990 |
| .0233 | 13:08 | 26.01 | 5.97 | .0167 | .988 |
| .0266 | 13:08 | 26.00 | 5.96 | .0200 | .987 |
| .0300 | 13:08 | 25.99 | 5.95 | .0234 | .985 |
| .0333 | 13:08 | 25.98 | 5.94 | .0267 | .983 |
| .0500 | 13:08 | 25.93 | 5.89 | .0434 | .975 |
| .0666 | 13:08 | 25.88 | 5.84 | .0600 | .967 |
| .0833 | 13:08 | 25.83 | 5.79 | .0767 | .959 |
| .1000 | 13:08 | 25.79 | 5.75 | .0934 | .952 |
| .1166 | 13:08 | 25.74 | 5.70 | .1100 | .944 |
| .1333 | 13:08 | 25.69 | 5.65 | .1267 | .935 |
| .1500 | 13:08 | 25.64 | 5.60 | .1434 | .927 |
| .1666 | 13:08 | 25.60 | 5.56 | .1600 | .921 |
| .1833 | 13:08 | 25.55 | 5.51 | .1767 | .912 |
| .2000 | 13:08 | 25.51 | 5.47 | .1934 | .906 |
| .2166 | 13:08 | 25.46 | 5.42 | .2100 | .897 |
| .2333 | 13:08 | 25.42 | 5.38 | .2267 | .891 |
| .2500 | 13:08 | 25.38 | 5.34 | .2434 | .884 |
| .2666 | 13:08 | 25.33 | 5.29 | .2600 | .876 |
| .2833 | 13:08 | 25.29 | 5.25 | .2767 | .869 |
| .3000 | 13:08 | 25.25 | 5.21 | .2934 | .863 |
| .3166 | 13:08 | 25.21 | 5.17 | .3100 | .856 |
| .3333 | 13:08 | 25.17 | 5.13 | .3267 | .849 |
| .4167 | 13:08 | 24.97 | 4.93 | .4101 | .816 |
| .5000 | 13:08 | 24.77 | 4.73 | .4934 | .783 |
| .5833 | 13:08 | 24.63 | 4.59 | .5767 | .760 |
| .6667 | 13:08 | 24.51 | 4.47 | .6601 | .740 |
| .7500 | 13:08 | 24.39 | 4.35 | .7434 | .720 |

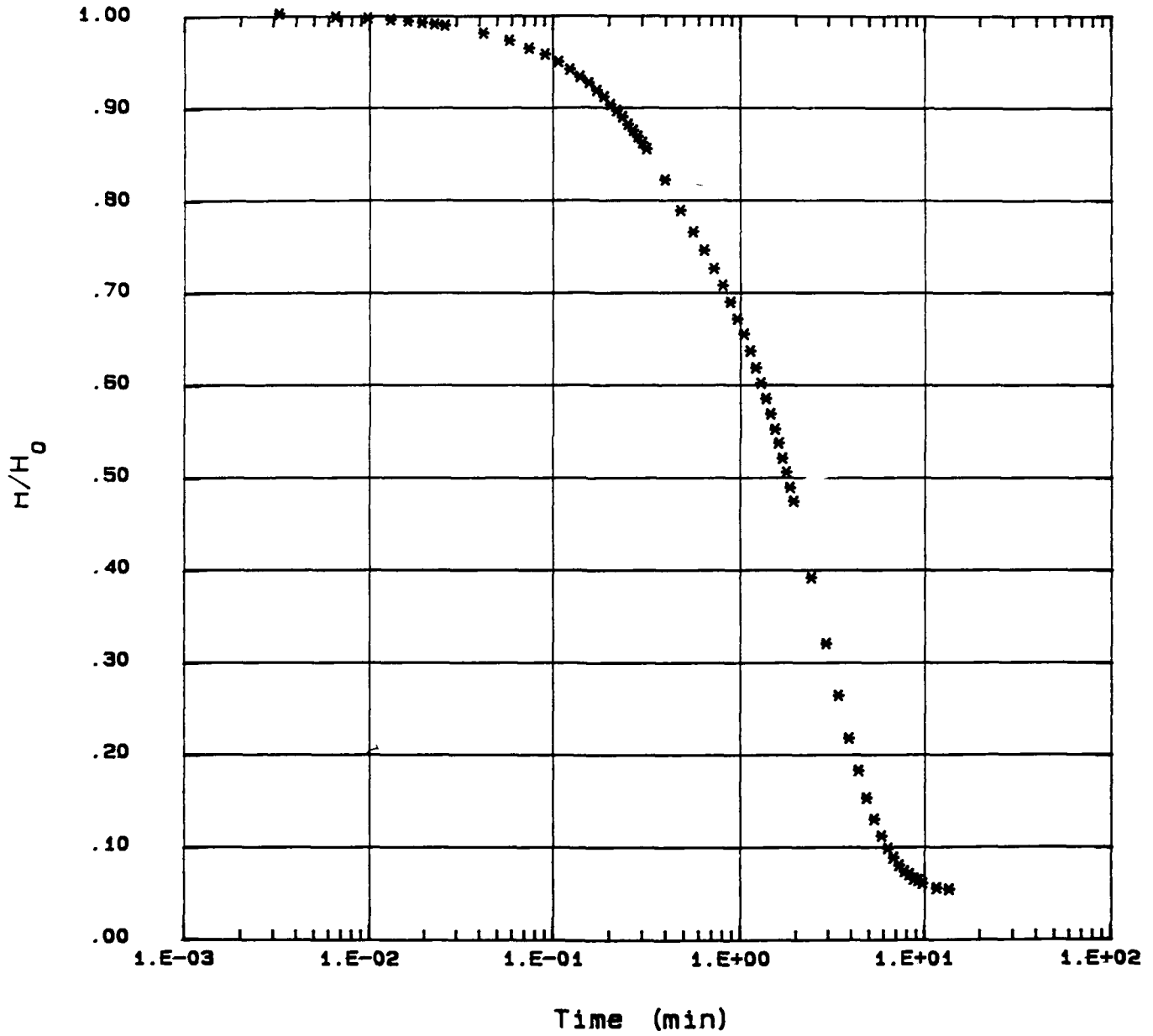
GNL-8 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 20.04 (Ft)
 H(0) : 6.04 (Ft)
 T(0) : .01 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .8333 | 13:08 | 24.28 | 4.24 | .8267 | .702 |
| .9167 | 13:08 | 24.17 | 4.13 | .9101 | .684 |
| 1.0000 | 13:08 | 24.06 | 4.02 | .9934 | .666 |
| 1.0833 | 13:09 | 23.96 | 3.92 | 1.0767 | .649 |
| 1.1667 | 13:09 | 23.85 | 3.81 | 1.1601 | .631 |
| 1.2500 | 13:09 | 23.74 | 3.70 | 1.2434 | .613 |
| 1.3333 | 13:09 | 23.64 | 3.60 | 1.3267 | .596 |
| 1.4166 | 13:09 | 23.54 | 3.50 | 1.4100 | .579 |
| 1.5000 | 13:09 | 23.44 | 3.40 | 1.4934 | .563 |
| 1.5833 | 13:09 | 23.34 | 3.30 | 1.5767 | .546 |
| 1.6667 | 13:09 | 23.25 | 3.21 | 1.6601 | .531 |
| 1.7500 | 13:09 | 23.15 | 3.11 | 1.7434 | .515 |
| 1.8333 | 13:09 | 23.06 | 3.02 | 1.8267 | .500 |
| 1.9167 | 13:09 | 22.96 | 2.92 | 1.9101 | .483 |
| 2.0000 | 13:09 | 22.87 | 2.83 | 1.9934 | .469 |
| 2.5000 | 13:10 | 22.37 | 2.33 | 2.4934 | .386 |
| 3.0000 | 13:10 | 21.94 | 1.90 | 2.9934 | .315 |
| 3.5000 | 13:11 | 21.60 | 1.56 | 3.4934 | .258 |
| 4.0000 | 13:11 | 21.32 | 1.28 | 3.9934 | .212 |
| 4.5000 | 13:12 | 21.11 | 1.07 | 4.4934 | .177 |
| 5.0000 | 13:12 | 20.93 | .89 | 4.9934 | .147 |
| 5.5000 | 13:13 | 20.79 | .75 | 5.4934 | .124 |
| 6.0000 | 13:13 | 20.68 | .64 | 5.9934 | .106 |
| 6.5000 | 13:14 | 20.60 | .56 | 6.4934 | .093 |
| 7.0000 | 13:14 | 20.54 | .50 | 6.9934 | .083 |
| 7.5000 | 13:15 | 20.49 | .45 | 7.4934 | .075 |
| 8.0000 | 13:15 | 20.45 | .41 | 7.9934 | .068 |
| 8.5000 | 13:16 | 20.43 | .39 | 8.4934 | .065 |
| 9.0000 | 13:16 | 20.40 | .36 | 8.9934 | .060 |
| 9.5000 | 13:17 | 20.39 | .35 | 9.4934 | .058 |
| 10.0000 | 13:17 | 20.37 | .33 | 9.9934 | .055 |
| 12.0000 | 13:19 | 20.34 | .30 | 11.9934 | .050 |
| 14.0000 | 13:21 | 20.33 | .29 | 13.9934 | .048 |

GNL-8 SLUG TEST 1



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-8 SLUG TEST 2

SLUG/SEWAB TEST

Ref. Value : 20.08 (Ft)
H(0) : 5.48 (Ft)
T(0) : 1.00 (Min)

| ELAPSED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(0) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| .0000 DAY 1 | 13:25 | 25.56 | 5.48 | .0000 | 1.000 |
| .0033 | 13:25 | 25.54 | 5.46 | .0033 | .996 |
| .0066 | 13:25 | 25.53 | 5.45 | .0066 | .995 |
| .0099 | 13:25 | 25.54 | 5.46 | .0099 | .996 |
| .0133 | 13:25 | 25.53 | 5.45 | .0133 | .995 |
| .0166 | 13:25 | 25.53 | 5.45 | .0166 | .995 |
| .0200 | 13:25 | 25.51 | 5.43 | .0200 | .991 |
| .0233 | 13:25 | 25.50 | 5.42 | .0233 | .989 |
| .0266 | 13:25 | 25.49 | 5.41 | .0266 | .987 |
| .0300 | 13:25 | 25.48 | 5.40 | .0300 | .985 |
| .0333 | 13:25 | 25.47 | 5.39 | .0333 | .984 |
| .0500 | 13:25 | 25.43 | 5.35 | .0500 | .976 |
| .0666 | 13:25 | 25.39 | 5.31 | .0666 | .969 |
| .0833 | 13:25 | 25.34 | 5.26 | .0833 | .960 |
| .1000 | 13:25 | 25.30 | 5.22 | .1000 | .953 |
| .1166 | 13:25 | 25.25 | 5.17 | .1166 | .943 |
| .1333 | 13:25 | 25.21 | 5.13 | .1333 | .936 |
| .1500 | 13:25 | 25.17 | 5.09 | .1500 | .929 |
| .1666 | 13:25 | 25.13 | 5.05 | .1666 | .922 |
| .1833 | 13:25 | 25.08 | 5.00 | .1833 | .912 |
| .2000 | 13:25 | 25.04 | 4.96 | .2000 | .905 |
| .2166 | 13:25 | 25.00 | 4.92 | .2166 | .898 |
| .2333 | 13:25 | 24.96 | 4.88 | .2333 | .891 |
| .2500 | 13:25 | 24.92 | 4.84 | .2500 | .883 |
| .2666 | 13:25 | 24.88 | 4.80 | .2666 | .876 |
| .2833 | 13:25 | 24.84 | 4.76 | .2833 | .869 |
| .3000 | 13:25 | 24.80 | 4.72 | .3000 | .861 |
| .3166 | 13:25 | 24.76 | 4.68 | .3166 | .854 |
| .3333 | 13:25 | 24.72 | 4.64 | .3333 | .847 |
| .4167 | 13:25 | 24.54 | 4.46 | .4167 | .814 |
| .5000 | 13:25 | 24.40 | 4.32 | .5000 | .788 |
| .5833 | 13:25 | 24.28 | 4.20 | .5833 | .766 |
| .6667 | 13:25 | 24.16 | 4.08 | .6667 | .745 |
| .7500 | 13:25 | 24.06 | 3.98 | .7500 | .726 |

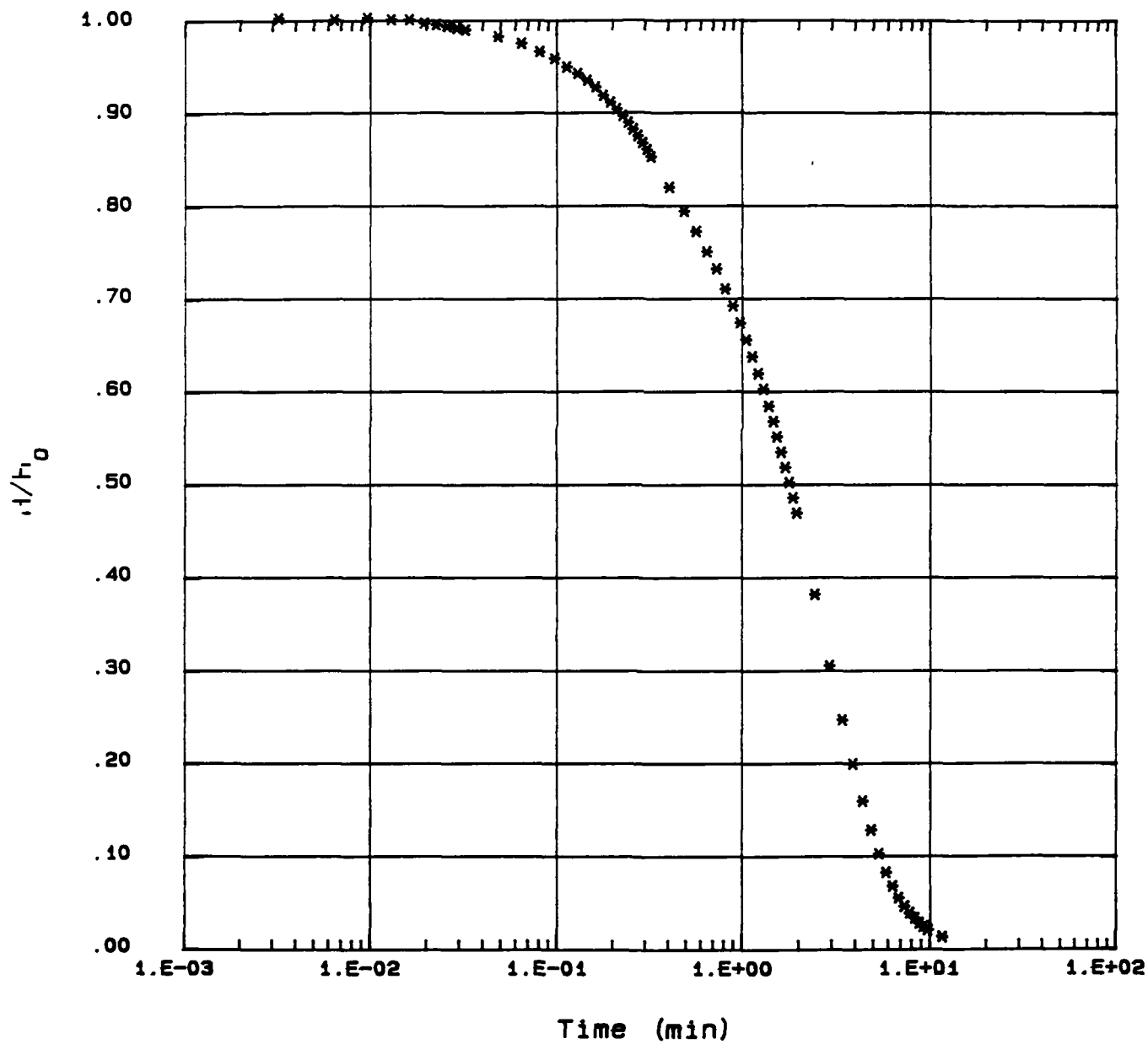
GNL-8 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 20.08 (Ft)
H(O) : 5.48 (Ft)
T(O) : .00 (Min)

| ELAP ED TIME (Min) | REAL TIME (hh:mm) | VALUE (Ft) | HD/DRWDN (Ft) | DELTA TIME (Min) | H/H(O) |
|-----------------------|----------------------|---------------|------------------|---------------------|--------|
| | | | | | |
| .8333 | 13:25 | 23.94 | 3.86 | .8333 | .704 |
| .9167 | 13:25 | 23.84 | 3.76 | .9167 | .686 |
| 1.0000 | 13:26 | 23.74 | 3.66 | 1.0000 | .668 |
| 1.0833 | 13:26 | 23.64 | 3.56 | 1.0833 | .650 |
| 1.1667 | 13:26 | 23.54 | 3.46 | 1.1667 | .631 |
| 1.2500 | 13:26 | 23.44 | 3.36 | 1.2500 | .613 |
| 1.3333 | 13:26 | 23.35 | 3.27 | 1.3333 | .597 |
| 1.4166 | 13:26 | 23.25 | 3.17 | 1.4166 | .578 |
| 1.5000 | 13:26 | 23.16 | 3.08 | 1.5000 | .562 |
| 1.5833 | 13:26 | 23.07 | 2.99 | 1.5833 | .546 |
| 1.6667 | 13:26 | 22.98 | 2.90 | 1.6667 | .529 |
| 1.7500 | 13:26 | 22.89 | 2.81 | 1.7500 | .513 |
| 1.8333 | 13:26 | 22.80 | 2.72 | 1.8333 | .496 |
| 1.9167 | 13:26 | 22.71 | 2.63 | 1.9167 | .480 |
| 2.0000 | 13:27 | 22.62 | 2.54 | 2.0000 | .464 |
| 2.5000 | 13:27 | 22.14 | 2.06 | 2.5000 | .376 |
| 3.0000 | 13:28 | 21.72 | 1.64 | 3.0000 | .299 |
| 3.5000 | 13:28 | 21.40 | 1.32 | 3.5000 | .241 |
| 4.0000 | 13:29 | 21.14 | 1.06 | 4.0000 | .193 |
| 4.5000 | 13:29 | 20.92 | .84 | 4.5000 | .153 |
| 5.0000 | 13:30 | 20.75 | .67 | 5.0000 | .122 |
| 5.5000 | 13:30 | 20.61 | .53 | 5.5000 | .097 |
| 6.0000 | 13:31 | 20.50 | .42 | 6.0000 | .077 |
| 6.5000 | 13:31 | 20.42 | .34 | 6.5000 | .062 |
| 7.0000 | 13:32 | 20.35 | .27 | 7.0000 | .049 |
| 7.5000 | 13:32 | 20.30 | .22 | 7.5000 | .040 |
| 8.0000 | 13:33 | 20.26 | .18 | 8.0000 | .033 |
| 8.5000 | 13:33 | 20.23 | .15 | 8.5000 | .027 |
| 9.0000 | 13:34 | 20.20 | .12 | 9.0000 | .022 |
| 9.5000 | 13:34 | 20.18 | .10 | 9.5000 | .018 |
| 10.0000 | 13:35 | 20.16 | .08 | 10.0000 | .015 |
| 12.0000 | 13:37 | 20.12 | .04 | 12.0000 | .007 |

GNL-8 SLUG TEST 2



APPENDIX D
ANALYTICAL RESULTS

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:42:42 1989

For Parameters :

Installation = Gaithersburg Research Facility
Beginning Date = 01/01/75
Ending Date = 12/7/89
Media Type = Chemical Ground Water (CGW)
Booleans = Y

Dec 7, 1989

IR Installation: Gaithersburg Research FacilityPage 1
Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNC-5

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 35.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 35.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 35.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 35.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 35.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 35.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 35.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 35.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 35.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |

Dec 7, 1989

IR Installation: Gaithersburg Research FacilityPage 2
 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-5 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 35.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 35.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 35.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 35.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | CD | | 8.150 | UGL |
| 35.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 35.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 35.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 35.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 35.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 35.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 35.0 | 25-may-1989 | SS06 | CU | LT | 6.200 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 35.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 35.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 35.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 35.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 35.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 35.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |

Dec 7, 1989

IR Installation: Gaithersburg Research FacilityPage 3
 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-5 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 35.0 | 25-may-1989 | 99 | HG | | 0.160 | UGL |
| 35.0 | 25-may-1989 | UH09 | HPCL | LT | 0.019 | UGL |
| 35.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 35.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 35.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 35.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 35.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 35.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 35.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 35.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 35.0 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 35.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 35.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 35.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |

Dec 7, 1989

IR Installation: Gaithersburg Research FacilityPage 4
Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNC-5 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 35.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK536 | | 9.530 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK538 | | 12.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK541 | | 32.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK542 | | 6.150 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK542 | | 6.890 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK543 | | 5.430 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK544 | | 16.400 | UGL |
| 35.0 | 25-may-1989 | SS06 | ZN | | 30.500 | UGL |

Site: WELL GNC-6

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 40.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 40.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 40.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 40.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 40.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 40.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 40.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 40.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 40.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 40.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 40.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 40.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 40.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 40.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 40.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 40.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 40.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |

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Analytical Results for Chemical Ground Water
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Site: WELL GNC-6 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 40.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 40.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 40.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 40.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 40.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 40.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 40.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 40.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 40.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 40.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 40.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 40.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 40.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 40.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 40.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 40.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 40.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 40.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | BGH .PY | LT | 64.600 | UGL |
| 40.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 40.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 40.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 40.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 40.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 40.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 40.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 40.0 | 25-may-1989 | SS06 | CD | | 6.970 | UGL |
| 40.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 40.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 40.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 40.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 40.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 40.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 40.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 40.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 40.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 40.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |

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Site: WELL GNC-6

(continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 40.0 | 25-may-1989 | SS06 | CU | LT | 6.200 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 40.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 40.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 40.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 40.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 40.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 40.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | DNOP | | 23.700 | UGL |
| 40.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 40.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 40.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 40.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 40.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 40.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 40.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 40.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | HCBBD | LT | 7.890 | UGL |
| 40.0 | 25-may-1989 | 99 | HG | | 0.110 | UGL |
| 40.0 | 25-may-1989 | UH09 | HPCL | LT | 0.019 | UGL |
| 40.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 40.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 40.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 40.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 40.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 40.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 40.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 40.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 40.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 40.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 40.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 40.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 40.0 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 40.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |

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Analytical Results for Chemical Ground Water
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Site: WELL GNC-6 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 40.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 40.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 40.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 40.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 40.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 40.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 40.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 40.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 40.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 40.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 40.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 40.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 40.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK536 | | 7.750 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK538 | | 9.250 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK541 | | 31.000 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK542 | | 5.150 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK542 | | 7.700 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK543 | | 4.420 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK544 | | 17.100 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK619 | | 8.620 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK620 | | 16.200 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK620 | | 9.030 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK620 | | 4.310 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK621 | | 15.400 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK621 | | 11.900 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK623 | | 10.200 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK628 | | 5.800 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK631 | | 9.800 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK636 | | 5.060 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK648 | | 4.090 | UGL |
| 40.0 | 25-may-1989 | UM13 | UNK655 | | 8.490 | UGL |
| 40.0 | 25-may-1989 | SS06 | ZN | | 19.400 | UGL |

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Site: WELL GNC-7

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 18.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 18.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 18.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 18.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 18.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 18.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 18.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 18.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 18.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 18.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 18.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 18.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 18.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 18.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 18.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 18.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 18.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 18.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 18.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 18.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 18.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 18.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 18.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 18.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 18.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 18.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 18.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 18.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 18.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 18.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 18.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |

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 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-7 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 18.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 18.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 18.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 18.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 18.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 18.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 18.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 18.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 18.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 18.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 18.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 18.0 | 25-may-1989 | SS06 | CD | | 6.650 | UGL |
| 18.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 18.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 18.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 18.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 18.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 18.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 18.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 18.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 18.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 18.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 18.0 | 25-may-1989 | SS06 | CU | LT | 6.200 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 18.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 18.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 18.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 18.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 18.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 18.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | DNOP | | 36.800 | UGL |
| 18.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 18.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 18.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 18.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 18.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 18.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 18.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |

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 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-7

(continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 18.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | HCBBD | LT | 7.890 | UGL |
| 18.0 | 25-may-1989 | 99 | HG | | 0.100 | UGL |
| 18.0 | 25-may-1989 | UH09 | HPCL | LT | 0.019 | UGL |
| 18.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 18.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 18.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 18.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 18.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 18.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 18.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 18.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 18.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 18.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | SS06 | NI | | 33.300 | UGL |
| 18.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 18.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 18.0 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 18.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 18.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 18.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 18.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 18.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 18.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 18.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 18.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 18.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 18.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |

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Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNC-7 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 18.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 18.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 18.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK536 | | 11.400 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK538 | | 11.600 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK541 | | 34.800 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK542 | | 8.610 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK543 | | 6.800 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK543 | | 5.910 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK544 | | 17.700 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK619 | | 20.200 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK619 | | 11.600 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK620 | | 34.300 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK620 | | 20.200 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK620 | | 11.400 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK621 | | 32.200 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK621 | | 25.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK623 | | 20.200 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK628 | | 10.500 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK630 | | 17.400 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK648 | | 7.560 | UGL |
| 18.0 | 25-may-1989 | UM13 | UNK655 | | 11.400 | UGL |
| 18.0 | 25-may-1989 | SS06 | ZN | | 19.400 | UGL |

Site: WELL GNC-8

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 25.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 25.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 25.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 25.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 25.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 25.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 25.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 25.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 25.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 25.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 25.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 25.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 25.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |

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Site: WELL GNC-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 25.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 25.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 25.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 25.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 25.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 25.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 25.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 25.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 25.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 25.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 25.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 25.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 25.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 25.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 25.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 25.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 25.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 25.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 25.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 25.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 25.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 25.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 25.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 25.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 25.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 25.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 25.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 25.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 25.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 25.0 | 25-may-1989 | SS06 | CD | LT | 4.390 | UGL |
| 25.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |

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 Analytical Results for Chemical Ground Water
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Site: WELL GNC-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 25.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 25.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 25.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 25.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 25.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 25.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 25.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 25.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 25.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 25.0 | 25-may-1989 | SS06 | CU | | 8.000 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 25.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 25.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 25.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 25.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 25.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 25.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | DNOP | | 24.900 | UGL |
| 25.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 25.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 25.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 25.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 25.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 25.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 25.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 25.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 25.0 | 25-may-1989 | 99 | HG | | 0.150 | UGL |
| 25.0 | 25-may-1989 | UH09 | HPCL | LT | 0.019 | UGL |
| 25.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 25.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 25.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 25.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 25.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 25.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 25.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 25.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 25.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 25.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |

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Site: WELL GNC-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 25.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 25.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 25.0 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 25.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 25.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 25.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 25.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 25.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 25.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 25.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | | 3.000 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 25.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 25.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 25.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 25.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 25.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK536 | | 13.200 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK538 | | 13.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK540 | | 4.320 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK540 | | 4.250 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK541 | | 42.800 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK542 | | 8.650 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK543 | | 8.290 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK543 | | 7.130 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK544 | | 21.600 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK599 | | 4.850 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK619 | | 12.900 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK620 | | 22.000 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK620 | | 11.900 | UGL |

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 From: 01/01/75 and 12/7/89

Site: WELL GNC-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 25.0 | 25-may-1989 | UM13 | UNK621 | | 21.300 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK621 | | 17.100 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK622 | | 13.600 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK628 | | 6.310 | UGL |
| 25.0 | 25-may-1989 | UM13 | UNK630 | | 10.700 | UGL |
| 25.0 | 25-may-1989 | SS06 | ZN | | 21.100 | UGL |

Site: WELL GNL-1

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 35.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 35.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 35.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 35.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 35.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 35.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |

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Site: WELL GNL-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 35.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 35.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 35.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 35.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 35.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 35.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | CD | | 7.400 | UGL |
| 35.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 35.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 35.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 35.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 35.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 35.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 35.0 | 25-may-1989 | SS06 | CU | | 17.700 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 35.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 35.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |

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Site: WELL GNL-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 35.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 35.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 35.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 35.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 35.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 35.0 | 25-may-1989 | 99 | HG | | 0.150 | UGL |
| 35.0 | 25-may-1989 | UH09 | HPCL | | 0.104 | UGL |
| 35.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 35.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 35.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 35.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 35.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 35.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 35.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 35.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 35.0 | 25-may-1989 | SD11 | PB | | 4.570 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |

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Site: WELL GNL-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 35.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | | 2.880 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 35.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 35.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 35.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 35.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK536 | | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK538 | | 11.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK541 | | 36.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK542 | | 9.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK543 | | 7.510 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK543 | | 6.380 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK544 | | 19.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK599 | | 4.190 | UGL |
| 35.0 | 25-may-1989 | SS06 | ZN | | 39.300 | UGL |

Site: WELL GNL-2

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 30.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 30.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 30.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 30.0 | 25-may-1989 | 99 | 11DCE | LT | 2.700 | UGL |
| 30.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 30.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 30.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 30.0 | 25-may-1989 | 99 | 12DCE | LT | 1.000 | UGL |
| 30.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 30.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 30.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 30.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |

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Site: WELL GNL-2 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 30.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 30.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 30.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 30.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 30.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 30.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 30.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 30.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 30.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 30.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 30.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 30.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 30.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 30.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 30.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 30.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 30.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 30.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 30.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 30.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 30.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 30.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 30.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 30.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | BGHIPI | LT | 64.600 | UGL |
| 30.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 30.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 30.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 30.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 30.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 30.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 30.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |

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Site: WELL GNL-2 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 30.0 | 25-may-1989 | SS06 | CD | | 7.830 | UGL |
| 30.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 30.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 30.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 30.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 30.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 30.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 30.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 30.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 30.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 30.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 30.0 | 25-may-1989 | SS06 | CU | | 10.400 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 30.0 | 25-may-1989 | UH09 | DBHC | ND | 0.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 30.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 30.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 30.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 30.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 30.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 30.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 30.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 30.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 30.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 30.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 30.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 30.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 30.0 | 25-may-1989 | 99 | HG | | 0.110 | UGL |
| 30.0 | 25-may-1989 | UH09 | HPCL | | 0.100 | UGL |
| 30.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 30.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 30.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 30.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 30.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 30.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 30.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 30.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 30.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |

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Site: WELL GNL-2 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 30.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 30.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 30.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 30.0 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 30.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 30.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 30.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 30.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 30.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 30.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 30.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 30.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 30.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 30.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 30.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 30.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK536 | | 16.500 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK538 | | 16.000 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK540 | | 4.240 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK540 | | 4.180 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK541 | | 41.700 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK542 | | 8.980 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK543 | | 6.760 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK543 | | 8.260 | UGL |
| 30.0 | 25-may-1989 | UM13 | UNK544 | | 20.800 | UGL |
| 30.0 | 25-may-1989 | SS06 | ZN | | 42.600 | UGL |

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Site: WELL GNL-3

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 35.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 35.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 35.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 35.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 35.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 35.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 35.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 35.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 35.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 35.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |

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Site: WELL GNL-3 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 35.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 35.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 35.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 35.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 35.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 35.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 35.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | CD | | 8.480 | UGL |
| 35.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 35.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 35.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 35.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 35.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 35.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 35.0 | 25-may-1989 | SS06 | CU | | 14.400 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 35.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 35.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 35.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 35.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 35.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | DNEP | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 35.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 35.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 35.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |

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Site: WELL GNL-3 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 35.0 | 25-may-1989 | 99 | HG | | 0.120 | UGL |
| 35.0 | 25-may-1989 | UH09 | HPCL | | 0.107 | UGL |
| 35.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 35.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 35.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 35.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 35.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 35.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 35.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 35.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 35.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 35.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 35.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 35.0 | 25-may-1989 | SD11 | PB | | 35.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 35.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 35.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 35.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 35.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 35.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |

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Site: WELL GNL-3 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 35.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 35.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 35.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK536 | | 11.200 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK538 | | 11.700 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK541 | | 36.400 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK542 | | 8.880 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK543 | | 6.940 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK543 | | 6.080 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK544 | | 18.300 | UGL |
| 35.0 | 25-may-1989 | UM13 | UNK599 | | 4.830 | UGL |
| 35.0 | 25-may-1989 | SS06 | ZN | | 62.600 | UGL |

Site: WELL GNL-4

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 15.0 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 15.0 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 15.0 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 15.0 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 15.0 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 15.0 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 15.0 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 15.0 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 15.0 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 15.0 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 15.0 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 15.0 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 15.0 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 15.0 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 15.0 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 15.0 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |

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Site: WELL GNL-4 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 15.0 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 15.0 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 15.0 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 15.0 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 15.0 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 15.0 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 15.0 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 15.0 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 15.0 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 15.0 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 15.0 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 15.0 | 25-may-1989 | UM13 | B2EHP | | 115.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 15.0 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 15.0 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 15.0 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 15.0 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 15.0 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 15.0 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 15.0 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 15.0 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 15.0 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 15.0 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 15.0 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 15.0 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 15.0 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 15.0 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 15.0 | 25-may-1989 | SS06 | CD | | 7.730 | UGL |
| 15.0 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 15.0 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 15.0 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 15.0 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 15.0 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 15.0 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 15.0 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 15.0 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 15.0 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |

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 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNL-4 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 15.0 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 15.0 | 25-may-1989 | SS06 | CU | | 14.400 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 15.0 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 15.0 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 15.0 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 15.0 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 15.0 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 15.0 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 15.0 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 15.0 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 15.0 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 15.0 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 15.0 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 15.0 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 15.0 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 15.0 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 15.0 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 15.0 | 25-may-1989 | 99 | HG | | 0.100 | UGL |
| 15.0 | 25-may-1989 | UH09 | HPCL | | 0.107 | UGL |
| 15.0 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 15.0 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 15.0 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 15.0 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 15.0 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 15.0 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 15.0 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 15.0 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 15.0 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 15.0 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 15.0 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 15.0 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 15.0 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 15.0 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |

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IR Installation: Gaithersburg Research FacilityPage 28
Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNL-4 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 15.0 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 15.0 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 15.0 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 15.0 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 15.0 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 15.0 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 15.0 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 15.0 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 15.0 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 15.0 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 15.0 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 15.0 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 15.0 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK536 | | 11.300 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK538 | | 13.600 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK541 | | 36.300 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK542 | | 7.890 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK543 | | 5.980 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK543 | | 7.190 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK544 | | 18.200 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK599 | | 12.200 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK619 | | 11.200 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK620 | | 19.900 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK620 | | 12.000 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK620 | | 5.680 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK621 | | 20.800 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK621 | | 16.200 | UGL |
| 15.0 | 25-may-1989 | UM13 | UNK621 | | 12.200 | UGL |
| 15.0 | 25-may-1989 | SS06 | ZN | | 23.500 | UGL |

Program ended normally.

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:43:56 1989

For Parameters :

Installation = Gaithersburg Research Facility
Beginning Date = 01/01/75
Ending Date = 12/7/89
Media Type = Chemical Surface Water (CSW)
Booleans = Y

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Analytical Results for Chemical Surface Water
From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.5 | 25-may-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 0.5 | 25-may-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 0.5 | 25-may-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 0.5 | 25-may-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 0.5 | 25-may-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 0.5 | 25-may-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 0.5 | 25-may-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 0.5 | 25-may-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 0.5 | 25-may-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 0.5 | 25-may-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 0.5 | 25-may-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 0.5 | 25-may-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 24DMFN | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 0.5 | 25-may-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 0.5 | 25-may-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 0.5 | 25-may-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 0.5 | 25-may-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 0.5 | 25-may-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 0.5 | 25-may-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 0.5 | 25-may-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 0.5 | 25-may-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 0.5 | 25-may-1989 | SS06 | AG | LT | 5.450 | UGL |
| 0.5 | 25-may-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 0.5 | 25-may-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 0.5 | 25-may-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 0.5 | 25-may-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 0.5 | 25-may-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 0.0 | 25-may-1989 | SD11 | AS | LT | 4.190 | UGL |
| 0.5 | 25-may-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 0.5 | 25-may-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 0.5 | 25-may-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 0.5 | 25-may-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 0.5 | 25-may-1989 | UH09 | BBHC | ND | 0.050 | UGL |

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Analytical Results for Chemical Surface Water
From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.5 | 25-may-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 0.5 | 25-may-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | SS06 | BE | LT | 2.860 | UGL |
| 0.5 | 25-may-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 0.5 | 25-may-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 0.5 | 25-may-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 0.5 | 25-may-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 0.5 | 25-may-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 0.5 | 25-may-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 0.5 | 25-may-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 0.5 | 25-may-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 0.5 | 25-may-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 0.5 | 25-may-1989 | SS06 | CD | | 6.650 | UGL |
| 0.5 | 25-may-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 0.5 | 25-may-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 0.5 | 25-may-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 0.5 | 25-may-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 0.5 | 25-may-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 0.5 | 25-may-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 0.5 | 25-may-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 0.5 | 25-may-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 0.5 | 25-may-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 0.5 | 25-may-1989 | SS06 | CR | LT | 4.440 | UGL |
| 0.5 | 25-may-1989 | SS06 | CU | | 9.600 | UGL |
| 0.0 | 25-may-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 0.5 | 25-may-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 0.5 | 25-may-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 0.5 | 25-may-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 0.5 | 25-may-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 0.5 | 25-may-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 0.5 | 25-may-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | DNOP | | 43.900 | UGL |
| 0.5 | 25-may-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 0.5 | 25-may-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 0.5 | 25-may-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 0.5 | 25-may-1989 | UH09 | ESFSO4 | ND | 0.100 | UGL |
| 0.5 | 25-may-1989 | UM13 | ESFSO4 | ND | 6.000 | UGL |
| 0.5 | 25-may-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 0.5 | 25-may-1989 | UM13 | FANT | LT | 1.150 | UGL |

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IR Installation: Gaithersburg Research Facility Page 3
 Analytical Results for Chemical Surface Water
 From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.5 | 25-may-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | HCBBD | LT | 7.890 | UGL |
| 0.5 | 25-may-1989 | 99 | HG | | 0.100 | UGL |
| 0.5 | 25-may-1989 | UH09 | HPCL | | 0.087 | UGL |
| 0.5 | 25-may-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 0.5 | 25-may-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 0.5 | 25-may-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 0.5 | 25-may-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 0.5 | 25-may-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 0.5 | 25-may-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 0.5 | 25-may-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 0.5 | 25-may-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 0.5 | 25-may-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 0.5 | 25-may-1989 | UM13 | NB | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | SS06 | NI | LT | 15.300 | UGL |
| 0.5 | 25-may-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 0.5 | 25-may-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 0.5 | 25-may-1989 | SD11 | PB | LT | 1.700 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 0.5 | 25-may-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 0.5 | 25-may-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 0.5 | 25-may-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 0.5 | 25-may-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 0.5 | 25-may-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 0.5 | 25-may-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 0.5 | 25-may-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 0.0 | 25-may-1989 | SD11 | SB | LT | 2.500 | UGL |
| 0.0 | 25-may-1989 | SD11 | SE | LT | 6.940 | UGL |
| 0.5 | 25-may-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 0.5 | 25-may-1989 | 99 | TCLEE | LT | 2.300 | UGL |

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IR Installation: Gaithersburg Research FacilityPage 4
Analytical Results for Chemical Surface Water
From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.5 | 25-may-1989 | SS06 | TL | LT | 59.900 | UGL |
| 0.5 | 25-may-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 0.5 | 25-may-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK536 | | 12.300 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK538 | | 15.300 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK540 | | 4.050 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK541 | | 39.600 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK542 | | 7.300 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK543 | | 8.140 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK543 | | 6.650 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK544 | | 20.100 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK619 | | 24.600 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK620 | | 45.700 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK620 | | 20.200 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK621 | | 45.500 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK621 | | 29.400 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK623 | | 32.100 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK628 | | 9.980 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK648 | | 10.200 | UGL |
| 0.5 | 25-may-1989 | UM13 | UNK655 | | 18.600 | UGL |
| 0.5 | 25-may-1989 | SS06 | ZN | | 14.500 | UGL |

Program ended normally.

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:45:32 1989

For Parameters :

Installation = Gaithersburg Research Facility
Beginning Date = 01/01/75
Ending Date = 12/7/89
Media Type = Chemical Sediment (CSE)
Booleans = Y

Dec 7, 1989

IR Installation: Gaithersburg Research Facility Page 1
Analytical Results for Chemical Sediment
From: 01/01/75 and 12/7/89

Site: STRM GNL-SS-1

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.5 | 02-jun-1989 | 99 | 111TCE | LT | 0.008 | UGG |
| 0.5 | 02-jun-1989 | 99 | 112TCE | LT | 0.004 | UGG |
| 0.5 | 02-jun-1989 | 99 | 11DCE | LT | 0.016 | UGG |
| 0.5 | 02-jun-1989 | 99 | 11DCLE | LT | 0.010 | UGG |
| 0.5 | 02-jun-1989 | 99 | 12DCE | LT | 0.008 | UGG |
| 0.5 | 02-jun-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 0.5 | 02-jun-1989 | 99 | 12DCLP | LT | 0.013 | UGG |
| 0.5 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.007 | UGG |
| 0.5 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 0.5 | 02-jun-1989 | 99 | ACROLN | ND | 0.130 | UGG |
| 0.5 | 02-jun-1989 | 99 | ACRYLO | ND | 0.130 | UGG |
| 0.5 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.5 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 0.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.5 | 02-jun-1989 | JD11 | AS | LT | 1.980 | UGG |
| 0.5 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 0.487 | UGG |
| 0.5 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 0.5 | 02-jun-1989 | 99 | BRDCLM | ND | 6.520 | UGG |
| 0.5 | 02-jun-1989 | 99 | C13DCP | LT | 0.004 | UGG |
| 0.5 | 02-jun-1989 | 99 | C2H3CL | LT | 0.010 | UGG |
| 0.5 | 02-jun-1989 | 99 | C2H5CL | LT | 0.013 | UGG |
| 0.5 | 02-jun-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 0.5 | 02-jun-1989 | 99 | CCL4 | LT | 0.003 | UGG |
| 0.5 | 02-jun-1989 | JS05 | CD | LT | 1.090 | UGG |
| 0.0 | 02-jun-1989 | 99 | CH2CL2 | ND | 0.007 | UGG |
| 0.5 | 02-jun-1989 | 99 | CH3BR | ND | 0.013 | UGG |
| 0.5 | 02-jun-1989 | 99 | CH3CL | LT | 0.006 | UGG |
| 0.5 | 02-jun-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 0.5 | 02-jun-1989 | 99 | CHCL3 | LT | 0.020 | UGG |
| 0.5 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.003 | UGG |
| 0.5 | 02-jun-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 0.5 | 02-jun-1989 | JS05 | CR | | 10.900 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 10.200 | UGG |
| 0.0 | 02-jun-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 0.5 | 02-jun-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 0.5 | 02-jun-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 0.5 | 02-jun-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 0.5 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 0.5 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 0.5 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 0.5 | 02-jun-1989 | 99 | ETC6H5 | LT | 0.013 | UGG |
| 0.5 | 02-jun-1989 | 99 | HG | LT | 0.018 | UGG |
| 0.0 | 02-jun-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 0.5 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 0.5 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 0.5 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 0.5 | 02-jun-1989 | 99 | MEC6H5 | LT | 0.008 | UGG |

Dec 7, 1989

IR Installation: Gaithersburg Research FacilityPage 2
Analytical Results for Chemical Sediment
From: 01/01/75 and 12/7/89

Site: STRM GNL-SS-1 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.5 | 02-jun-1989 | LH08 | MEXCLR | ND | 0.080 | UGG |
| 0.0 | 02-jun-1989 | JS05 | NI | | 9.140 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 96.100 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PPDDD | LT | 0.020 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PPDDE | LT | 0.016 | UGG |
| 0.5 | 02-jun-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SB | LT | 0.513 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 1.880 | UGG |
| 0.5 | 02-jun-1989 | 99 | TCLEA | LT | 0.004 | UGG |
| 0.5 | 02-jun-1989 | 99 | TCLEE | LT | 0.010 | UGG |
| 0.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 0.5 | 02-jun-1989 | 99 | TRCLE | LT | 0.003 | UGG |
| 0.5 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 02-jun-1989 | JS05 | ZN | | 27.900 | UGG |

Program ended normally.

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:46:39 1989

For Parameters :

Installation = Gaithersburg Research Facility

Beginning Date = 01/01/75

Ending Date = 12/7/89

Media Type = Chemical Soil (CSO)

Booleans = Y

Dec 7, 1989

IR Installation: Gaithersburg Research FacilityPage 1
Analytical Results for Chemical Soil
From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 914.0 | 17-apr-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 914.0 | 17-apr-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 914.0 | 17-apr-1989 | 99 | 11DCE | LT | 0.015 | UGG |
| 914.0 | 17-apr-1989 | 99 | 11DCLE | LT | 0.009 | UGG |
| 0.0 | 17-apr-1989 | 99 | 124TCB | LT | 0.207 | UGG |
| 914.0 | 17-apr-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 0.0 | 17-apr-1989 | 99 | 12DCLB | LT | 0.402 | UGG |
| 914.0 | 17-apr-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 914.0 | 17-apr-1989 | 99 | 12DCLP | LT | 0.012 | UGG |
| 0.0 | 17-apr-1989 | 99 | 13DCLB | LT | 0.365 | UGG |
| 0.0 | 17-apr-1989 | 99 | 14DCLB | LT | 0.353 | UGG |
| 0.0 | 17-apr-1989 | 99 | 246TCP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 24DCLP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 24DMPN | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 24DNP | ND | 2.440 | UGG |
| 0.0 | 17-apr-1989 | 99 | 24DNT | LT | 0.560 | UGG |
| 0.0 | 17-apr-1989 | 99 | 26DNT | LT | 0.244 | UGG |
| 914.0 | 17-apr-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 0.0 | 17-apr-1989 | 99 | 2CLP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 2CNAP | LT | 0.390 | UGG |
| 0.0 | 17-apr-1989 | 99 | 2NP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 33DCBD | ND | 0.853 | UGG |
| 0.0 | 17-apr-1989 | 99 | 46DN2C | ND | 2.440 | UGG |
| 0.0 | 17-apr-1989 | 99 | 4BRPPE | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 4CL3C | ND | 0.353 | UGG |
| 0.0 | 17-apr-1989 | 99 | 4CLPPE | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | 4NP | ND | 2.440 | UGG |
| 0.0 | 17-apr-1989 | 99 | ABHC | ND | 0.609 | UGG |
| 914.0 | 17-apr-1989 | 99 | ABHC | ND | 0.008 | UGG |
| 914.0 | 17-apr-1989 | 99 | ACROLN | ND | 0.122 | UGG |
| 914.0 | 17-apr-1989 | 99 | ACRYLO | ND | 0.122 | UGG |
| 0.0 | 17-apr-1989 | 99 | AENSLF | ND | 0.609 | UGG |
| 914.0 | 17-apr-1989 | 99 | AENSLF | ND | 0.008 | UGG |
| 914.0 | 17-apr-1989 | JS05 | AG | LT | 0.953 | UGG |
| 0.0 | 17-apr-1989 | 99 | ALDRN | LT | 0.512 | UGG |
| 914.0 | 17-apr-1989 | 99 | ALDRN | LT | 0.011 | UGG |
| 0.0 | 17-apr-1989 | 99 | ANAPNE | LT | 0.414 | UGG |
| 0.0 | 17-apr-1989 | 99 | ANAPYL | LT | 0.378 | UGG |
| 0.0 | 17-apr-1989 | 99 | ANTRC | LT | 0.353 | UGG |
| 914.0 | 17-apr-1989 | JD11 | AS | LT | 2.410 | UGG |
| 0.0 | 17-apr-1989 | 99 | B2CEXM | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | B2CIPE | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | B2CLEE | LT | 0.463 | UGG |
| 0.0 | 17-apr-1989 | 99 | B2EHP | | 6.820 | UGG |
| 0.0 | 17-apr-1989 | 99 | BAANTR | LT | 0.329 | UGG |
| 0.0 | 17-apr-1989 | 99 | BAPYR | LT | 0.195 | UGG |
| 0.0 | 17-apr-1989 | 99 | BBFANT | LT | 0.304 | UGG |
| 0.0 | 17-apr-1989 | 99 | BBHC | LT | 0.402 | UGG |

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IR Installation: Gaithersburg Research FacilityPage 2
 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 914.0 | 17-apr-1989 | 99 | BBHC | ND | 0.008 | UGG |
| 0.0 | 17-apr-1989 | 99 | BBZP | ND | 0.402 | UGG |
| 914.0 | 17-apr-1989 | JS05 | BE | | 1.600 | UGG |
| 0.0 | 17-apr-1989 | 99 | BENSLF | ND | 1.220 | UGG |
| 914.0 | 17-apr-1989 | 99 | BENSLF | ND | 0.016 | UGG |
| 0.0 | 17-apr-1989 | 99 | BENZID | ND | 1.950 | UGG |
| 0.0 | 17-apr-1989 | 99 | BGHIPY | LT | 0.633 | UGG |
| 0.0 | 17-apr-1989 | 99 | BKFANT | LT | 0.268 | UGG |
| 914.0 | 17-apr-1989 | 99 | BRDCLM | ND | 6.090 | UGG |
| 0.0 | 17-apr-1989 | 99 | BZALC | ND | 0.402 | UGG |
| 914.0 | 17-apr-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 914.0 | 17-apr-1989 | 99 | C2H3CL | LT | 0.009 | UGG |
| 914.0 | 17-apr-1989 | 99 | C2H5CL | LT | 0.012 | UGG |
| 914.0 | 17-apr-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 914.0 | 17-apr-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 914.0 | 17-apr-1989 | JS05 | CD | LT | 1.330 | UGG |
| 914.0 | 17-apr-1989 | 99 | CH2CL2 | ND | 0.012 | UGG |
| 914.0 | 17-apr-1989 | 99 | CH3BR | ND | 0.012 | UGG |
| 914.0 | 17-apr-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 914.0 | 17-apr-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 914.0 | 17-apr-1989 | 99 | CHCL3 | LT | 0.018 | UGG |
| 0.0 | 17-apr-1989 | 99 | CHRY | LT | 0.231 | UGG |
| 0.0 | 17-apr-1989 | 99 | CL6BZ | LT | 0.426 | UGG |
| 0.0 | 17-apr-1989 | 99 | CL6CP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | CL6ET | LT | 0.171 | UGG |
| 914.0 | 17-apr-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 0.0 | 17-apr-1989 | 99 | CLDAN | LT | 0.987 | UGG |
| 914.0 | 17-apr-1989 | 99 | CLDAN | LT | 0.028 | UGG |
| 914.0 | 17-apr-1989 | JS05 | CR | | 24.200 | UGG |
| 914.0 | 17-apr-1989 | JS05 | CU | | 29.500 | UGG |
| 914.0 | 17-apr-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 0.0 | 17-apr-1989 | 99 | DBAHA | LT | 0.694 | UGG |
| 0.0 | 17-apr-1989 | 99 | DBHC | LT | 0.694 | UGG |
| 914.0 | 17-apr-1989 | 99 | DBHC | ND | 0.008 | UGG |
| 914.0 | 17-apr-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 0.0 | 17-apr-1989 | 99 | DEP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | DLDRN | LT | 1.050 | UGG |
| 914.0 | 17-apr-1989 | 99 | DLDRN | LT | 0.006 | UGG |
| 0.0 | 17-apr-1989 | 99 | DMP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | DNBP | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | DNOP | LT | 0.426 | UGG |
| 0.0 | 17-apr-1989 | 99 | ENDRN | LT | 0.463 | UGG |
| 914.0 | 17-apr-1989 | 99 | ENDRN | ND | 0.016 | UGG |
| 914.0 | 17-apr-1989 | 99 | ENDRNK | ND | 0.016 | UGG |
| 0.0 | 17-apr-1989 | 99 | ESFSO4 | ND | 1.220 | UGG |
| 914.0 | 17-apr-1989 | 99 | ESFSO4 | ND | 0.016 | UGG |
| 914.0 | 17-apr-1989 | 99 | ETC6H5 | LT | 0.012 | UGG |
| 0.0 | 17-apr-1989 | 99 | FANT | LT | 0.256 | UGG |

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IR Installation: Gaithersburg Research FacilityPage 3
 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.0 | 17-apr-1989 | 99 | FLRENE | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | HCBD | LT | 0.353 | UGG |
| 1.0 | 17-apr-1989 | JB09 | HG | LT | 0.018 | UGG |
| 0.0 | 17-apr-1989 | 99 | HPCL | LT | 0.329 | UGG |
| 914.0 | 17-apr-1989 | 99 | HPCL | LT | 0.013 | UGG |
| 0.0 | 17-apr-1989 | 99 | HPCLE | LT | 0.901 | UGG |
| 914.0 | 17-apr-1989 | 99 | HPCLE | LT | 0.094 | UGG |
| 0.0 | 17-apr-1989 | 99 | ICDPYR | LT | 0.548 | UGG |
| 914.0 | 17-apr-1989 | 99 | ISODR | LT | 0.120 | UGG |
| 0.0 | 17-apr-1989 | 99 | ISOPHR | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | LIN | LT | 0.365 | UGG |
| 914.0 | 17-apr-1989 | 99 | LIN | LT | 0.044 | UGG |
| 914.0 | 17-apr-1989 | 99 | MEC6H5 | LT | 0.008 | UGG |
| 914.0 | 17-apr-1989 | 99 | MEXCLR | ND | 0.080 | UGG |
| 0.0 | 17-apr-1989 | 99 | NAP | LT | 0.341 | UGG |
| 0.0 | 17-apr-1989 | 99 | NB | ND | 0.402 | UGG |
| 914.0 | 17-apr-1989 | JS05 | NI | | 29.400 | UGG |
| 0.0 | 17-apr-1989 | 99 | NNDMEA | ND | 0.402 | UGG |
| 0.0 | 17-apr-1989 | 99 | NNDNPA | LT | 0.134 | UGG |
| 0.0 | 17-apr-1989 | 99 | NNDPA | ND | 0.402 | UGG |
| 914.0 | 17-apr-1989 | JS05 | PB | LT | 117.000 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB016 | ND | 6.090 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB221 | ND | 6.090 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB232 | ND | 6.090 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB242 | ND | 6.090 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB248 | ND | 6.090 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB254 | ND | 12.200 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCB260 | ND | 12.200 | UGG |
| 914.0 | 17-apr-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 0.0 | 17-apr-1989 | 99 | PCP | ND | 2.440 | UGG |
| 0.0 | 17-apr-1989 | 99 | PHANTR | LT | 1.950 | UGG |
| 0.0 | 17-apr-1989 | 99 | PPDDD | LT | 0.475 | UGG |
| 914.0 | 17-apr-1989 | 99 | PPDDD | LT | 0.017 | UGG |
| 0.0 | 17-apr-1989 | 99 | PPDDE | LT | 0.487 | UGG |
| 914.0 | 17-apr-1989 | 99 | PPDDE | LT | 0.014 | UGG |
| 0.0 | 17-apr-1989 | 99 | PPDDT | LT | 0.585 | UGG |
| 914.0 | 17-apr-1989 | 99 | PPDDT | LT | 0.017 | UGG |
| 0.0 | 17-apr-1989 | 99 | PYR | LT | 0.646 | UGG |
| 914.0 | 17-apr-1989 | JD11 | SB | | 1.170 | UGG |
| 914.0 | 17-apr-1989 | JD11 | SE | LT | 2.280 | UGG |
| 914.0 | 17-apr-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 914.0 | 17-apr-1989 | 99 | TCLEE | LT | 0.010 | UGG |

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 IR Installation: Gaithersburg Research FacilityPage 4
 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 914.0 | 17-apr-1989 | JD11 | TL | LT | 2.620 | UGG |
| 914.0 | 17-apr-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 0.0 | 17-apr-1989 | 99 | TXPHEN | ND | 12.200 | UGG |
| 914.0 | 17-apr-1989 | 99 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK519 | | 0.459 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK523 | | 1.500 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK524 | | 0.441 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK524 | | 0.496 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK525 | | 0.421 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK528 | | 6.570 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK530 | | 0.692 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK531 | | 0.552 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK535 | | 0.565 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK538 | | 0.603 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK538 | | 0.803 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK539 | | 0.963 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK545 | | 1.620 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK591 | | 0.432 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK601 | | 0.481 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK609 | | 0.382 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK619 | | 1.470 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK628 | | 0.865 | UGG |
| 0.0 | 17-apr-1989 | 99 | UNK629 | | 18.600 | UGG |
| 914.0 | 17-apr-1989 | JS05 | ZN | | 151.000 | UGG |

Site: BORE GNL-SS-2

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 3.0 | 02-jun-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 3.0 | 02-jun-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | 99 | 11DCE | LT | 0.014 | UGG |
| 3.0 | 02-jun-1989 | 99 | 11DCLE | LT | 0.009 | UGG |
| 3.0 | 02-jun-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 3.0 | 02-jun-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 3.0 | 02-jun-1989 | 99 | 12DCLP | LT | 0.012 | UGG |
| 3.0 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 3.0 | 02-jun-1989 | 99 | ACROLN | ND | 0.121 | UGG |
| 3.0 | 02-jun-1989 | 99 | ACRYLO | ND | 0.121 | UGG |
| 3.0 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.0 | 02-jun-1989 | JD11 | AS | LT | 1.980 | UGG |
| 3.0 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 0.792 | UGG |

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Site: BORE GNL-SS-2 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 3.0 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | 99 | BRDCLM | ND | 6.050 | UGG |
| 3.0 | 02-jun-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | 99 | C2H3CL | LT | 0.009 | UGG |
| 3.0 | 02-jun-1989 | 99 | C2H5CL | LT | 0.012 | UGG |
| 3.0 | 02-jun-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 3.0 | 02-jun-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CD | LT | 1.090 | UGG |
| 3.0 | 02-jun-1989 | 99 | CH2CL2 | ND | 0.006 | UGG |
| 3.0 | 02-jun-1989 | 99 | CH3BR | ND | 0.012 | UGG |
| 3.0 | 02-jun-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 3.0 | 02-jun-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 3.0 | 02-jun-1989 | 99 | CHCL3 | LT | 0.018 | UGG |
| 3.0 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 3.0 | 02-jun-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CR | | 12.900 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 32.000 | UGG |
| 0.0 | 02-jun-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 3.0 | 02-jun-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 3.0 | 02-jun-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | 99 | ETC6H5 | LT | 0.012 | UGG |
| 0.0 | 02-jun-1989 | 99 | HG | | 0.027 | UGG |
| 3.0 | 02-jun-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 3.0 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 3.0 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 3.0 | 02-jun-1989 | 99 | MEC6H5 | LT | 0.007 | UGG |
| 3.0 | 02-jun-1989 | LH08 | MEXCLR | ND | 0.080 | UGG |
| 0.0 | 02-jun-1989 | JS05 | NI | | 8.590 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 96.100 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PPDDD | LT | 0.020 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PPDDE | LT | 0.016 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SB | LT | 0.476 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 1.880 | UGG |

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Site: BORE GNL-SS-2 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 3.0 | 02-jun-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | 99 | TCLEE | LT | 0.010 | UGG |
| 0.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 3.0 | 02-jun-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 3.0 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 02-jun-1989 | JS05 | ZN | | 37.300 | UGG |

Site: BORE GNL-SS-3

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 3.0 | 02-jun-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 3.0 | 02-jun-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | 99 | 11DCE | LT | 0.014 | UGG |
| 3.0 | 02-jun-1989 | 99 | 11DCLE | LT | 0.009 | UGG |
| 3.0 | 02-jun-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 3.0 | 02-jun-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 3.0 | 02-jun-1989 | 99 | 12DCLP | LT | 0.012 | UGG |
| 3.0 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 3.0 | 02-jun-1989 | 99 | ACROLN | ND | 0.121 | UGG |
| 3.0 | 02-jun-1989 | 99 | ACRYLO | ND | 0.121 | UGG |
| 3.0 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.0 | 02-jun-1989 | JD11 | AS | LT | 1.980 | UGG |
| 3.0 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 0.670 | UGG |
| 3.0 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | 99 | BRDCLM | ND | 6.040 | UGG |
| 3.0 | 02-jun-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | 99 | C2H3CL | LT | 0.009 | UGG |
| 3.0 | 02-jun-1989 | 99 | C2H5CL | LT | 0.012 | UGG |
| 3.0 | 02-jun-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 3.0 | 02-jun-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CD | LT | 1.090 | UGG |
| 3.0 | 02-jun-1989 | 99 | CH2CL2 | ND | 0.006 | UGG |
| 3.0 | 02-jun-1989 | 99 | CH3BR | ND | 0.012 | UGG |
| 3.0 | 02-jun-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 3.0 | 02-jun-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 3.0 | 02-jun-1989 | 99 | CHCL3 | LT | 0.018 | UGG |
| 3.0 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 3.0 | 02-jun-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CR | LT | 9.630 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 18.200 | UGG |

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Analytical Results for Chemical Soil
From: 01/01/75 and 12/7/89

Site: BORE GNL-SS-3 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.0 | 02-jun-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 3.0 | 02-jun-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 3.0 | 02-jun-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 3.0 | 02-jun-1989 | 99 | ETC6H5 | LT | 0.012 | UGG |
| 0.0 | 02-jun-1989 | 99 | HG | | 0.091 | UGG |
| 3.0 | 02-jun-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 3.0 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 3.0 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 3.0 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 3.0 | 02-jun-1989 | 99 | MEC6H5 | LT | 0.007 | UGG |
| 3.0 | 02-jun-1989 | LH08 | MEXCLR | ND | 0.080 | UGG |
| 0.0 | 02-jun-1989 | JS05 | NI | | 4.760 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 96.100 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PPDDD | LT | 0.020 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PPDDE | LT | 0.016 | UGG |
| 3.0 | 02-jun-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SB | LT | 0.476 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 1.880 | UGG |
| 3.0 | 02-jun-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 3.0 | 02-jun-1989 | 99 | TCLEE | LT | 0.010 | UGG |
| 0.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 3.0 | 02-jun-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 3.0 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 02-jun-1989 | JS05 | ZN | | 28.200 | UGG |

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From: 01/01/75 and 12/7/89

Site: DTCH GNC-SS-6

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 4.0 | 02-jun-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 4.0 | 02-jun-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 4.0 | 02-jun-1989 | 99 | 11DCE | LT | 0.015 | UGG |
| 4.0 | 02-jun-1989 | 99 | 11DCLE | LT | 0.009 | UGG |
| 4.0 | 02-jun-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 4.0 | 02-jun-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 4.0 | 02-jun-1989 | 99 | 12DCLP | LT | 0.012 | UGG |
| 4.0 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 4.0 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 4.0 | 02-jun-1989 | 99 | ACROLN | ND | 0.122 | UGG |
| 4.0 | 02-jun-1989 | 99 | ACRYLO | ND | 0.122 | UGG |
| 4.0 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 4.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.0 | 02-jun-1989 | JD11 | AS | LT | 1.980 | UGG |
| 4.0 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 0.731 | UGG |
| 4.0 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 4.0 | 02-jun-1989 | 99 | BRDCLM | ND | 6.090 | UGG |
| 4.0 | 02-jun-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 4.0 | 02-jun-1989 | 99 | C2H3CL | LT | 0.010 | UGG |
| 4.0 | 02-jun-1989 | 99 | C2H5CL | LT | 0.012 | UGG |
| 4.0 | 02-jun-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 4.0 | 02-jun-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CD | LT | 1.090 | UGG |
| 4.0 | 02-jun-1989 | 99 | CH2CL2 | ND | 0.006 | UGG |
| 4.0 | 02-jun-1989 | 99 | CH3BR | ND | 0.012 | UGG |
| 4.0 | 02-jun-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 4.0 | 02-jun-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 4.0 | 02-jun-1989 | 99 | CHCL3 | LT | 0.018 | UGG |
| 4.0 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 4.0 | 02-jun-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CR | | 10.400 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 20.500 | UGG |
| 0.0 | 02-jun-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 4.0 | 02-jun-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 4.0 | 02-jun-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 4.0 | 02-jun-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 4.0 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 4.0 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 4.0 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 4.0 | 02-jun-1989 | 99 | ETC6H5 | LT | 0.012 | UGG |
| 0.0 | 02-jun-1989 | 99 | HG | LT | 0.018 | UGG |
| 4.0 | 02-jun-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 4.0 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 4.0 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 4.0 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 4.0 | 02-jun-1989 | 99 | MEC6H5 | LT | 0.008 | UGG |

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 Analytical Results for Chemical Soil
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Site: DTCH GNC-SS-6 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 4.0 | 02-jun-1989 | LH08 | MEXCLR | ND | 0.080 | UGG |
| 0.0 | 02-jun-1989 | JS05 | NI | | 4.070 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 96.100 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PPDDD | LT | 0.020 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PPDDE | LT | 0.016 | UGG |
| 4.0 | 02-jun-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SB | LT | 0.480 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 1.880 | UGG |
| 4.0 | 02-jun-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 4.0 | 02-jun-1989 | 99 | TCLEE | LT | 0.010 | UGG |
| 0.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 4.0 | 02-jun-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 4.0 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 02-jun-1989 | JS05 | ZN | | 20.800 | UGG |

Site: DTCH GNC-SS-7

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 2.0 | 02-jun-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | 11DCE | LT | 0.014 | UGG |
| 2.0 | 02-jun-1989 | 99 | 11DCLE | LT | 0.008 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCLE | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCLP | LT | 0.011 | UGG |
| 2.0 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 2.0 | 02-jun-1989 | 99 | ACROLN | ND | 0.114 | UGG |
| 2.0 | 02-jun-1989 | 99 | ACRYLO | ND | 0.114 | UGG |
| 2.0 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.0 | 02-jun-1989 | JD11 | AS | | 2.550 | UGG |
| 2.0 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 1.580 | UGG |

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Site: DTCH GNC-SS-7 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 2.0 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | 99 | BRDCLM | ND | 5.700 | UGG |
| 2.0 | 02-jun-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | C2H3CL | LT | 0.009 | UGG |
| 2.0 | 02-jun-1989 | 99 | C2H5CL | LT | 0.011 | UGG |
| 2.0 | 02-jun-1989 | 99 | C6H6 | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | 99 | CD | LT | 1.090 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CH2CL2 | ND | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH3BR | ND | 0.011 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | CHBR3 | LT | 0.004 | UGG |
| 2.0 | 02-jun-1989 | 99 | CHCL3 | LT | 0.017 | UGG |
| 2.0 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | 99 | CLDAN | LT | 0.032 | UGG |
| 2.0 | 02-jun-1989 | LH08 | CR | | 40.300 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 100.000 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CYN | LT | 22.300 | UGG |
| 0.0 | 02-jun-1989 | KF12 | DBHC | ND | 0.008 | UGG |
| 2.0 | 02-jun-1989 | LH08 | DBRCLM | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | DLDRN | LT | 0.008 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ETC6H5 | LT | 0.011 | UGG |
| 2.0 | 02-jun-1989 | 99 | HG | | 0.020 | UGG |
| 0.0 | 02-jun-1989 | 99 | HPCL | LT | 0.014 | UGG |
| 2.0 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 2.0 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 2.0 | 02-jun-1989 | LH08 | MEC6H5 | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | MEXCLR | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | NI | | 36.100 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 96.100 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PCB016 | LT | 0.092 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PFDDD | LT | 0.020 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PFDDDE | LT | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PFDDT | LT | 0.018 | UGG |
| 2.0 | 02-jun-1989 | LH08 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 0.448 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 1.880 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | | |

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Analytical Results for Chemical Soil
From: 01/01/75 and 12/7/89

Site: DTCH GNC-SS-7 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 2.0 | 02-jun-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | TCLEE | LT | 0.009 | UGG |
| 0.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 2.0 | 02-jun-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 02-jun-1989 | JS05 | ZN | | 100.000 | UGG |

Site: DTCH GNL-SS-4

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 2.0 | 02-jun-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | 11DCE | LT | 0.014 | UGG |
| 2.0 | 02-jun-1989 | 99 | 11DCLE | LT | 0.009 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCLP | LT | 0.012 | UGG |
| 2.0 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 2.0 | 02-jun-1989 | 99 | ACROLN | ND | 0.120 | UGG |
| 2.0 | 02-jun-1989 | 99 | ACRYLO | ND | 0.120 | UGG |
| 2.0 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.0 | 02-jun-1989 | JD11 | AS | | 2.710 | UGG |
| 2.0 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 1.040 | UGG |
| 2.0 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | 99 | BRDCLM | ND | 5.990 | UGG |
| 2.0 | 02-jun-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | C2H3CL | LT | 0.009 | UGG |
| 2.0 | 02-jun-1989 | 99 | C2H5CL | LT | 0.012 | UGG |
| 2.0 | 02-jun-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CD | LT | 1.090 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH2CL2 | ND | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH3BR | ND | 0.012 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | CHCL3 | LT | 0.018 | UGG |
| 2.0 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CR | | 20.000 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 35.100 | UGG |

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Analytical Results for Chemical Soil
From: 01/01/75 and 12/7/89

Site: DTCH GNL-SS-4 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 0.0 | 02-jun-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 2.0 | 02-jun-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 2.0 | 02-jun-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | 99 | ETC6H5 | LT | 0.012 | UGG |
| 0.0 | 02-jun-1989 | 99 | HG | | 0.018 | UGG |
| 2.0 | 02-jun-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 2.0 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 2.0 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 2.0 | 02-jun-1989 | 99 | MEC6H5 | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | LH08 | MEXCLR | ND | 0.080 | UGG |
| 0.0 | 02-jun-1989 | JS05 | NI | | 8.450 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 96.100 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PPDDD | LT | 0.020 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PPDDE | LT | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SB | LT | 0.471 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 1.880 | UGG |
| 2.0 | 02-jun-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | TCLEE | LT | 0.009 | UGG |
| 0.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 2.0 | 02-jun-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 0.0 | 02-jun-1989 | JS05 | ZN | | 34.800 | UGG |

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Site: DTCH GNL-SS-5

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| 2.0 | 02-jun-1989 | 99 | 111TCE | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | 11DCE | LT | 0.014 | UGG |
| 2.0 | 02-jun-1989 | 99 | 11DCLE | LT | 0.009 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCE | LT | 0.007 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCLE | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | 12DCLP | LT | 0.012 | UGG |
| 2.0 | 02-jun-1989 | 99 | 2CLEVE | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 2.0 | 02-jun-1989 | 99 | ACROLN | ND | 0.119 | UGG |
| 2.0 | 02-jun-1989 | 99 | ACRYLO | ND | 0.119 | UGG |
| 2.0 | 02-jun-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | AG | LT | 0.783 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 0.0 | 02-jun-1989 | JD11 | AS | LT | 1.980 | UGG |
| 2.0 | 02-jun-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 0.0 | 02-jun-1989 | JS05 | BE | | 0.823 | UGG |
| 2.0 | 02-jun-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | 99 | BRDCLM | ND | 5.970 | UGG |
| 2.0 | 02-jun-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | C2H3CL | LT | 0.009 | UGG |
| 2.0 | 02-jun-1989 | 99 | C2H5CL | LT | 0.012 | UGG |
| 2.0 | 02-jun-1989 | 99 | C6H6 | LT | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CD | LT | 1.090 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH2CL2 | ND | 0.006 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH3BR | ND | 0.012 | UGG |
| 2.0 | 02-jun-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | CHBR3 | LT | 0.005 | UGG |
| 2.0 | 02-jun-1989 | 99 | CHCL3 | LT | 0.018 | UGG |
| 2.0 | 02-jun-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CR | | 27.300 | UGG |
| 0.0 | 02-jun-1989 | JS05 | CU | | 81.000 | UGG |
| 0.0 | 02-jun-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 2.0 | 02-jun-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 2.0 | 02-jun-1989 | 99 | DBRCLM | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ESFSO4 | ND | 0.016 | UGG |
| 2.0 | 02-jun-1989 | 99 | ETC6H5 | LT | 0.012 | UGG |
| 0.0 | 02-jun-1989 | 99 | HG | | 0.033 | UGG |
| 2.0 | 02-jun-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 2.0 | 02-jun-1989 | LH08 | HPCLE | LT | 0.094 | UGG |
| 2.0 | 02-jun-1989 | LH08 | ISODR | LT | 0.140 | UGG |
| 2.0 | 02-jun-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 2.0 | 02-jun-1989 | 99 | MEC6H5 | LT | 0.007 | UGG |

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 Analytical Results for Chemical Soil
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Site: DTCH GNL-SS-5 (continued)

| SAMPLE DEPTH (ft) | SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------------|----------------|----------------|----------|------|---------------|-------|
| | | | | | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | MEXCLR | ND | 21.400 | UGG |
| 0.0 | 02-jun-1989 | JS05 | NI | | 96.100 | UGG |
| 0.0 | 02-jun-1989 | JS05 | PB | LT | 0.092 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB016 | LT | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB248 | ND | 0.160 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB254 | ND | 0.065 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PCB260 | LT | 0.020 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PPDDD | LT | 0.016 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PPDDE | LT | 0.018 | UGG |
| 2.0 | 02-jun-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 2.0 | 02-jun-1989 | JS05 | SB | ND | 11.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SB | LT | 0.470 | UGG |
| 0.0 | 02-jun-1989 | JS05 | SE | LT | 103.000 | UGG |
| 0.0 | 02-jun-1989 | JD11 | SE | LT | 1.880 | UGG |
| 0.0 | 02-jun-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 2.0 | 02-jun-1989 | 99 | TCLEE | LT | 0.009 | UGG |
| 2.0 | 02-jun-1989 | JS05 | TL | LT | 67.600 | UGG |
| 0.0 | 02-jun-1989 | JD11 | TL | LT | 2.150 | UGG |
| 0.0 | 02-jun-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 2.0 | 02-jun-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 2.0 | 02-jun-1989 | JS05 | ZN | | 89.800 | UGG |

Program ended normally.

QA/QC
ANALYTICAL DATA

TABLES

Site: TRIP BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 25-MAY-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 25-MAY-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 25-MAY-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 25-MAY-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 25-MAY-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 25-MAY-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 25-MAY-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 25-MAY-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 25-MAY-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 25-MAY-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 25-MAY-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 25-MAY-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 25-MAY-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 25-MAY-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 25-MAY-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 25-MAY-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 25-MAY-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 25-MAY-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 25-MAY-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 25-MAY-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 25-MAY-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 25-MAY-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 25-MAY-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 25-MAY-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 25-MAY-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 25-MAY-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 25-MAY-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 25-MAY-1989 | 99 | TRCLE | LT | 1.000 | UGL |

Site: FIELD BLANK

| | | | | | |
|-------------|------|--------|----|-------|-----|
| 25-MAY-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 25-MAY-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 25-MAY-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 25-MAY-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 25-MAY-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 25-MAY-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 25-MAY-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 25-MAY-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 25-MAY-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 25-MAY-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |

TABLES (cont.)

Site: FIELD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 25-MAY-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 25-MAY-1989 | UM13 | 246TCP | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 25-MAY-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 25-MAY-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 25-MAY-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 25-MAY-1989 | UM13 | 2CLF | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 25-MAY-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 25-MAY-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 25-MAY-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 25-MAY-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 25-MAY-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 25-MAY-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 25-MAY-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 25-MAY-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 25-MAY-1989 | UM13 | AENSLF | ND | 3.000 | UGL |
| 25-MAY-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 25-MAY-1989 | SS06 | AG | LT | 5.450 | UGL |
| 25-MAY-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 25-MAY-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 25-MAY-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 25-MAY-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 25-MAY-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 25-MAY-1989 | SD11 | AS | LT | 4.190 | UGL |
| 25-MAY-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 25-MAY-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 25-MAY-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 25-MAY-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 25-MAY-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 25-MAY-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 25-MAY-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 25-MAY-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 25-MAY-1989 | SS06 | BE | LT | 2.860 | UGL |
| 25-MAY-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 25-MAY-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 25-MAY-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 25-MAY-1989 | UM13 | BGHIPI | LT | 64.600 | UGL |

TABLES (cont.)

Site: FIELD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 25-MAY-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 25-MAY-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 25-MAY-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 25-MAY-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 25-MAY-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 25-MAY-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 25-MAY-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 25-MAY-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 25-MAY-1989 | SS06 | CD | | 6.010 | UGL |
| 25-MAY-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 25-MAY-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 25-MAY-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 25-MAY-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 25-MAY-1989 | 99 | CHCL3 | LT | 1.000 | UGL |
| 25-MAY-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 25-MAY-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 25-MAY-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 25-MAY-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 25-MAY-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 25-MAY-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 25-MAY-1989 | SS06 | CR | LT | 4.440 | UGL |
| 25-MAY-1989 | SS06 | CU | LT | 6.200 | UGL |
| 25-MAY-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 25-MAY-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 25-MAY-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 25-MAY-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 25-MAY-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 25-MAY-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 25-MAY-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 25-MAY-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 25-MAY-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 25-MAY-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 25-MAY-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 25-MAY-1989 | UM13 | ESFS04 | ND | 6.000 | UGL |
| 25-MAY-1989 | UH09 | ESFS04 | ND | 0.100 | UGL |
| 25-MAY-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 25-MAY-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 25-MAY-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 25-MAY-1989 | 99 | HG | | 0.100 | UGL |
| 25-MAY-1989 | UM13 | HPCL | LT | 4.910 | UGL |

TABLES (cont.)

Site: FIELD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 25-MAY-1989 | UH09 | HPCL | | 0.118 | UGL |
| 25-MAY-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 25-MAY-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 25-MAY-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 25-MAY-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 25-MAY-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 25-MAY-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 25-MAY-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 25-MAY-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 25-MAY-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 25-MAY-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 25-MAY-1989 | UM13 | NB | ND | 10.000 | UGL |
| 25-MAY-1989 | SS06 | NI | LT | 15.300 | UGL |
| 25-MAY-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 25-MAY-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 25-MAY-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 25-MAY-1989 | SD11 | PB | LT | 1.700 | UGL |
| 25-MAY-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 25-MAY-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 25-MAY-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 25-MAY-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 25-MAY-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 25-MAY-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 25-MAY-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 25-MAY-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 25-MAY-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 25-MAY-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 25-MAY-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 25-MAY-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 25-MAY-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 25-MAY-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 25-MAY-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 25-MAY-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 25-MAY-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 25-MAY-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 25-MAY-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 25-MAY-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 25-MAY-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 25-MAY-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 25-MAY-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 25-MAY-1989 | SD11 | SB | LT | 2.500 | UGL |
| 25-MAY-1989 | SD11 | SE | LT | 6.940 | UGL |
| 25-MAY-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 25-MAY-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 25-MAY-1989 | SS06 | TL | LT | 59.900 | UGL |

TABLES (cont.)

Site: FIELD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 25-MAY-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 25-MAY-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 25-MAY-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 25-MAY-1989 | UM13 | UNK536 | | 10.900 | UGL |
| 25-MAY-1989 | UM13 | UNK538 | | 14.300 | UGL |
| 25-MAY-1989 | UM13 | UNK541 | | 38.700 | UGL |
| 25-MAY-1989 | UM13 | UNK542 | | 7.960 | UGL |
| 25-MAY-1989 | UM13 | UNK543 | | 7.710 | UGL |
| 25-MAY-1989 | UM13 | UNK543 | | 6.220 | UGL |
| 25-MAY-1989 | UM13 | UNK544 | | 19.500 | UGL |
| 25-MAY-1989 | SS06 | ZN | | 7.420 | UGL |

Site: METHOD BLANK

| | | | | | |
|-------------|------|--------|----|--------|-----|
| 17-JUL-1989 | 99 | 111TCE | LT | 1.000 | UGL |
| 17-JUL-1989 | 99 | 111TCE | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | 111TCE | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | 112TCE | LT | 1.700 | UGL |
| 17-JUL-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 17-JUL-1989 | 99 | 112TCE | LT | 0.003 | UGG |
| 17-JUL-1989 | 99 | 11DCE | LT | 6.800 | UGL |
| 17-JUL-1989 | 99 | 11DCE | LT | 0.012 | UGG |
| 17-JUL-1989 | 99 | 11DCE | LT | 0.012 | UGG |
| 17-JUL-1989 | 99 | 11DCLE | LT | 2.700 | UGL |
| 17-JUL-1989 | 99 | 11DCLE | LT | 0.007 | UGG |
| 17-JUL-1989 | 99 | 11DCLE | LT | 0.007 | UGG |
| 17-JUL-1989 | 99 | 124TCB | LT | 0.170 | UGG |
| 17-JUL-1989 | UM13 | 124TCB | LT | 4.420 | UGL |
| 17-JUL-1989 | 99 | 12DCE | LT | 2.200 | UGL |
| 17-JUL-1989 | 99 | 12DCE | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | 12DCE | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | 12DCLB | LT | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 12DCLB | LT | 7.320 | UGL |
| 17-JUL-1989 | 99 | 12DCLE | LT | 1.000 | UGL |
| 17-JUL-1989 | 99 | 12DCLE | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | 12DCLE | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | 12DCLP | LT | 3.200 | UGL |
| 17-JUL-1989 | 99 | 12DCLP | LT | 0.010 | UGG |
| 17-JUL-1989 | 99 | 12DCLP | LT | 0.010 | UGG |
| 17-JUL-1989 | 99 | 13DCLB | LT | 0.300 | UGG |
| 17-JUL-1989 | UM13 | 13DCLB | LT | 8.270 | UGL |
| 17-JUL-1989 | 99 | 14DCLB | LT | 0.290 | UGG |
| 17-JUL-1989 | UM13 | 14DCLB | LT | 7.970 | UGL |
| 17-JUL-1989 | 99 | 246TCP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 246TCP | ND | 10.000 | UGL |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | 99 | 24DCLP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 24DCLP | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | 24DMPN | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 24DMPN | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | 24DNP | ND | 2.000 | UGG |
| 17-JUL-1989 | UM13 | 24DNP | ND | 50.000 | UGL |
| 17-JUL-1989 | 99 | 24DNT | LT | 0.460 | UGG |
| 17-JUL-1989 | UM13 | 24DNT | LT | 5.840 | UGL |
| 17-JUL-1989 | 99 | 26DNT | LT | 0.200 | UGG |
| 17-JUL-1989 | UM13 | 26DNT | LT | 5.520 | UGL |
| 17-JUL-1989 | 99 | 2CLEVE | LT | 1.600 | UGL |
| 17-JUL-1989 | 99 | 2CLEVE | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | 2CLEVE | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | 2CLP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 2CLP | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | 2CNAP | LT | 0.320 | UGG |
| 17-JUL-1989 | UM13 | 2CNAP | LT | 2.070 | UGL |
| 17-JUL-1989 | 99 | 2NP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 2NP | ND | 50.000 | UGL |
| 17-JUL-1989 | 99 | 33DCBD | ND | 0.700 | UGG |
| 17-JUL-1989 | UM13 | 33DCBD | ND | 20.000 | UGL |
| 17-JUL-1989 | 99 | 46DN2C | ND | 2.000 | UGG |
| 17-JUL-1989 | UM13 | 46DN2C | ND | 50.000 | UGL |
| 17-JUL-1989 | 99 | 4BRPPE | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 4BRPPE | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | 4CL3C | ND | 0.290 | UGG |
| 17-JUL-1989 | UM13 | 4CL3C | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | 4CLPPE | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | 4CLPPE | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | 4NP | ND | 2.000 | UGG |
| 17-JUL-1989 | UM13 | 4NP | ND | 50.000 | UGL |
| 17-JUL-1989 | 99 | ABHC | ND | 8000.000 | UGG |
| 17-JUL-1989 | 99 | ABHC | ND | 0.500 | UGG |
| 17-JUL-1989 | UM13 | ABHC | ND | 3.000 | UGL |
| 17-JUL-1989 | UH09 | ABHC | ND | 0.050 | UGL |
| 17-JUL-1989 | LH08 | ABHC | ND | 0.008 | UGG |
| 17-JUL-1989 | 99 | ACROLN | ND | 100.000 | UGL |
| 17-JUL-1989 | 99 | ACROLN | ND | 0.100 | UGG |
| 17-JUL-1989 | 99 | ACROLN | ND | 0.100 | UGG |
| 17-JUL-1989 | 99 | ACRYLO | ND | 100.000 | UGL |
| 17-JUL-1989 | 99 | ACRYLO | ND | 0.100 | UGG |
| 17-JUL-1989 | 99 | ACRYLO | ND | 0.100 | UGG |
| 17-JUL-1989 | 99 | AENSLF | ND | 0.008 | UGG |
| 17-JUL-1989 | 99 | AENSLF | ND | 0.500 | UGG |
| 17-JUL-1989 | UM13 | AENSLF | ND | 3.000 | UGL |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | UH09 | AENSLF | ND | 0.050 | UGL |
| 17-JUL-1989 | LH08 | AENSLF | ND | 0.008 | UGG |
| 17-JUL-1989 | JS05 | AG | LT | 0.953 | UGG |
| 17-JUL-1989 | SS06 | AG | LT | 5.450 | UGL |
| 17-JUL-1989 | JS05 | AG | LT | 0.783 | UGG |
| 17-JUL-1989 | 99 | ALDRN | LT | 0.011 | UGG |
| 17-JUL-1989 | 99 | ALDRN | LT | 0.420 | UGG |
| 17-JUL-1989 | UM13 | ALDRN | LT | 5.780 | UGL |
| 17-JUL-1989 | UH09 | ALDRN | LT | 0.022 | UGL |
| 17-JUL-1989 | LH08 | ALDRN | LT | 0.013 | UGG |
| 17-JUL-1989 | 99 | ANAPNE | LT | 0.340 | UGG |
| 17-JUL-1989 | UM13 | ANAPNE | LT | 1.260 | UGL |
| 17-JUL-1989 | 99 | ANAPYL | LT | 0.310 | UGG |
| 17-JUL-1989 | UM13 | ANAPYL | LT | 3.300 | UGL |
| 17-JUL-1989 | UM13 | ANTHRC | LT | 1.110 | UGL |
| 17-JUL-1989 | 99 | ANTRC | LT | 0.290 | UGG |
| 17-JUL-1989 | JD11 | AS | | 4.650 | UGG |
| 17-JUL-1989 | SD11 | AS | LT | 4.190 | UGL |
| 17-JUL-1989 | JD11 | AS | | 4.050 | UGG |
| 17-JUL-1989 | 99 | B2CEXM | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | B2CEXM | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | B2CIPE | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | B2CIPE | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | B2CLEE | LT | 0.380 | UGG |
| 17-JUL-1989 | UM13 | B2CLEE | LT | 1.500 | UGL |
| 17-JUL-1989 | 99 | B2EHP | | 9.300 | UGG |
| 17-JUL-1989 | UM13 | B2EHP | LT | 32.700 | UGL |
| 17-JUL-1989 | 99 | BAANTR | LT | 0.270 | UGG |
| 17-JUL-1989 | UM13 | BAANTR | LT | 0.906 | UGL |
| 17-JUL-1989 | 99 | BAPYR | LT | 0.160 | UGG |
| 17-JUL-1989 | UM13 | BAPYR | LT | 8.290 | UGL |
| 17-JUL-1989 | 99 | BBFANT | LT | 0.250 | UGG |
| 17-JUL-1989 | UM13 | BBFANT | LT | 2.650 | UGL |
| 17-JUL-1989 | 99 | BBHC | ND | 8000.000 | UGG |
| 17-JUL-1989 | 99 | BBHC | LT | 0.330 | UGG |
| 17-JUL-1989 | UM13 | BBHC | LT | 3.170 | UGL |
| 17-JUL-1989 | UH09 | BBHC | ND | 0.050 | UGL |
| 17-JUL-1989 | LH08 | BBHC | ND | 0.008 | UGG |
| 17-JUL-1989 | 99 | BBZP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | BBZP | ND | 10.000 | UGL |
| 17-JUL-1989 | JS05 | BE | | 0.608 | UGG |
| 17-JUL-1989 | SS06 | BE | LT | 2.860 | UGL |
| 17-JUL-1989 | JS05 | BE | | 0.487 | UGG |
| 17-JUL-1989 | 99 | BENSLF | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | BENSLF | ND | 1.000 | UGG |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | UM13 | BENSLF | ND | 6.000 | UGL |
| 17-JUL-1989 | UH09 | BENSLF | ND | 0.100 | UGL |
| 17-JUL-1989 | LH08 | BENSLF | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | BENZID | ND | 1.600 | UGG |
| 17-JUL-1989 | UM13 | BENZID | ND | 50.000 | UGL |
| 17-JUL-1989 | 99 | BGHIPY | LT | 0.520 | UGG |
| 17-JUL-1989 | UM13 | BGHIPY | LT | 64.600 | UGL |
| 17-JUL-1989 | 99 | BKFANT | LT | 0.220 | UGG |
| 17-JUL-1989 | UM13 | BKFANT | LT | 3.280 | UGL |
| 17-JUL-1989 | 99 | BRDCLM | ND | 5.000 | UGL |
| 17-JUL-1989 | 99 | BRDCLM | ND | 5.000 | UGG |
| 17-JUL-1989 | 99 | BRDCLM | ND | 5.000 | UGG |
| 17-JUL-1989 | 99 | BZALC | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | BZALC | ND | 0.100 | UGL |
| 17-JUL-1989 | 99 | C13DCP | LT | 1.800 | UGL |
| 17-JUL-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 17-JUL-1989 | 99 | C13DCP | LT | 0.003 | UGG |
| 17-JUL-1989 | 99 | C2H3CL | LT | 13.000 | UGL |
| 17-JUL-1989 | 99 | C2H3CL | LT | 0.008 | UGG |
| 17-JUL-1989 | 99 | C2H3CL | LT | 0.008 | UGG |
| 17-JUL-1989 | 99 | C2H5CL | LT | 6.900 | UGL |
| 17-JUL-1989 | 99 | C2H5CL | LT | 0.010 | UGG |
| 17-JUL-1989 | 99 | C2H5CL | LT | 0.010 | UGG |
| 17-JUL-1989 | 99 | C6H6 | LT | 1.700 | UGL |
| 17-JUL-1989 | 99 | C6H6 | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | C6H6 | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | CCL4 | LT | 1.000 | UGL |
| 17-JUL-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | CCL4 | LT | 0.002 | UGG |
| 17-JUL-1989 | JS05 | CD | LT | 1.330 | UGG |
| 17-JUL-1989 | SS06 | CD | LT | 4.390 | UGL |
| 17-JUL-1989 | JS05 | CD | LT | 1.090 | UGG |
| 17-JUL-1989 | 99 | CH2CL2 | LT | 23.000 | UGL |
| 17-JUL-1989 | 99 | CH2CL2 | ND | 0.005 | UGG |
| 17-JUL-1989 | 99 | CH2CL2 | ND | 0.010 | UGG |
| 17-JUL-1989 | 99 | CH3BR | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | CH3BR | ND | 0.010 | UGG |
| 17-JUL-1989 | 99 | CH3BR | ND | 0.010 | UGG |
| 17-JUL-1989 | 99 | CH3CL | LT | 1.800 | UGL |
| 17-JUL-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | CH3CL | LT | 0.005 | UGG |
| 17-JUL-1989 | 99 | CHBR3 | LT | 3.700 | UGL |
| 17-JUL-1989 | 99 | CHBR3 | LT | 0.004 | UGG |
| 17-JUL-1989 | 99 | CHBR3 | LT | 0.004 | UGG |
| 17-JUL-1989 | 99 | CHCL3 | | 4.100 | UGL |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | 99 | CHCL3 | LT | 0.015 | UGG |
| 17-JUL-1989 | 99 | CHCL3 | LT | 0.015 | UGG |
| 17-JUL-1989 | 99 | CHRY | LT | 0.190 | UGG |
| 17-JUL-1989 | UM13 | CHRY | LT | 1.150 | UGL |
| 17-JUL-1989 | 99 | CL6BZ | LT | 0.350 | UGG |
| 17-JUL-1989 | UM13 | CL6BZ | LT | 2.850 | UGL |
| 17-JUL-1989 | 99 | CL6CP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | CL6CP | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | CL6ET | LT | 0.140 | UGG |
| 17-JUL-1989 | UM13 | CL6ET | LT | 13.300 | UGL |
| 17-JUL-1989 | 99 | CLC6H5 | LT | 1.200 | UGL |
| 17-JUL-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | CLC6H5 | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | CLDAN | LT | 0.028 | UGG |
| 17-JUL-1989 | 99 | CLDAN | LT | 0.810 | UGG |
| 17-JUL-1989 | UM13 | CLDAN | LT | 10.200 | UGL |
| 17-JUL-1989 | UH09 | CLDAN | LT | 0.046 | UGL |
| 17-JUL-1989 | LH08 | CLDAN | LT | 0.032 | UGG |
| 17-JUL-1989 | JS05 | CR | | 15.900 | UGG |
| 17-JUL-1989 | SS06 | CR | LT | 4.440 | UGL |
| 17-JUL-1989 | JS05 | CR | | 9.640 | UGG |
| 17-JUL-1989 | JS05 | CU | | 21.700 | UGG |
| 17-JUL-1989 | SS06 | CU | | 9.700 | UGL |
| 17-JUL-1989 | JS05 | CU | | 16.700 | UGG |
| 17-JUL-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 17-JUL-1989 | TF19 | CYN | LT | 5.500 | UGL |
| 17-JUL-1989 | KF12 | CYN | LT | 22.300 | UGG |
| 17-JUL-1989 | 99 | DBAHA | LT | 0.570 | UGG |
| 17-JUL-1989 | UM13 | DBAHA | LT | 12.300 | UGL |
| 17-JUL-1989 | 99 | DBHC | ND | 0.008 | UGG |
| 17-JUL-1989 | 99 | DBHC | LT | 0.570 | UGG |
| 17-JUL-1989 | UM13 | DBHC | LT | 621.000 | UGL |
| 17-JUL-1989 | UH09 | DBHC | ND | 0.050 | UGL |
| 17-JUL-1989 | LH08 | DBHC | ND | 0.008 | UGG |
| 17-JUL-1989 | 99 | DBRCLM | LT | 1.800 | UGL |
| 17-JUL-1989 | 99 | DBRCLM | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | DBRCLM | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | DEP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | DEP | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | DLDRN | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | DLDRN | LT | 0.860 | UGG |
| 17-JUL-1989 | UM13 | DLDRN | LT | 2.550 | UGL |
| 17-JUL-1989 | UH09 | DLDRN | LT | 0.005 | UGL |
| 17-JUL-1989 | LH08 | DLDRN | LT | 0.008 | UGG |
| 17-JUL-1989 | 99 | DMP | ND | 0.330 | UGG |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | UM13 | DMP | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | DNBP | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | DNBP | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | DNOP | LT | 0.350 | UGG |
| 17-JUL-1989 | UM13 | DNOP | LT | 21.400 | UGL |
| 17-JUL-1989 | 99 | ENDRN | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | ENDRN | LT | 0.380 | UGG |
| 17-JUL-1989 | UM13 | ENDRN | LT | 34.200 | UGL |
| 17-JUL-1989 | UH09 | ENDRN | ND | 0.100 | UGL |
| 17-JUL-1989 | LH08 | ENDRN | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | ENDRNK | ND | 0.016 | UGG |
| 17-JUL-1989 | UH09 | ENDRNK | ND | 0.100 | UGL |
| 17-JUL-1989 | LH08 | ENDRNK | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | ESFS04 | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | ESFS04 | ND | 1.000 | UGG |
| 17-JUL-1989 | UM13 | ESFS04 | ND | 6.000 | UGL |
| 17-JUL-1989 | UH09 | ESFS04 | ND | 0.100 | UGL |
| 17-JUL-1989 | LH08 | ESFS04 | ND | 0.016 | UGG |
| 17-JUL-1989 | 99 | ETC6H5 | LT | 1.400 | UGL |
| 17-JUL-1989 | 99 | ETC6H5 | LT | 0.010 | UGG |
| 17-JUL-1989 | 99 | ETC6H5 | LT | 0.010 | UGG |
| 17-JUL-1989 | 99 | FANT | LT | 0.210 | UGG |
| 17-JUL-1989 | UM13 | FANT | LT | 1.150 | UGL |
| 17-JUL-1989 | 99 | FLRENE | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | FLRENE | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | HCBD | LT | 0.290 | UGG |
| 17-JUL-1989 | UM13 | HCBD | LT | 7.890 | UGL |
| 17-JUL-1989 | JB09 | HG | | 0.045 | UGG |
| 17-JUL-1989 | 99 | HG | | 0.110 | UGL |
| 17-JUL-1989 | 99 | HG | | 0.043 | UGG |
| 17-JUL-1989 | 99 | HPCL | LT | 0.013 | UGG |
| 17-JUL-1989 | 99 | HPCL | LT | 0.270 | UGG |
| 17-JUL-1989 | UM13 | HPCL | LT | 4.910 | UGL |
| 17-JUL-1989 | UH09 | HPCL | | 0.118 | UGL |
| 17-JUL-1989 | LH08 | HPCL | LT | 0.014 | UGG |
| 17-JUL-1989 | 99 | HPCLE | LT | 0.094 | UGG |
| 17-JUL-1989 | 99 | HPCLE | LT | 0.740 | UGG |
| 17-JUL-1989 | UM13 | HPCLE | LT | 6.440 | UGL |
| 17-JUL-1989 | UH09 | HPCLE | LT | 0.086 | UGL |
| 17-JUL-1989 | LH08 | HPCLE | LT | 0.093 | UGG |
| 17-JUL-1989 | 99 | ICDPYR | LT | 0.450 | UGG |
| 17-JUL-1989 | UM13 | ICDPYR | LT | 128.000 | UGL |
| 17-JUL-1989 | 99 | ISODR | LT | 0.120 | UGG |
| 17-JUL-1989 | UH09 | ISODR | LT | 0.041 | UGL |
| 17-JUL-1989 | LH08 | ISODR | LT | 0.140 | UGG |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | 99 | ISOPHR | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | ISOPHR | ND | 0.100 | UGL |
| 17-JUL-1989 | 99 | LIN | LT | 0.044 | UGG |
| 17-JUL-1989 | 99 | LIN | LT | 0.300 | UGG |
| 17-JUL-1989 | UM13 | LIN | LT | 26.000 | UGL |
| 17-JUL-1989 | UH09 | LIN | LT | 0.029 | UGL |
| 17-JUL-1989 | LH08 | LIN | LT | 0.041 | UGG |
| 17-JUL-1989 | 99 | MEC6H5 | LT | 1.800 | UGL |
| 17-JUL-1989 | 99 | MEC6H5 | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | MEC6H5 | LT | 0.006 | UGG |
| 17-JUL-1989 | 99 | MEXCLR | ND | 0.080 | UGG |
| 17-JUL-1989 | UH09 | MEXCLR | ND | 0.500 | UGL |
| 17-JUL-1989 | LH08 | MEXCLR | ND | 0.080 | UGG |
| 17-JUL-1989 | 99 | NAP | LT | 0.280 | UGG |
| 17-JUL-1989 | UM13 | NAP | LT | 3.510 | UGL |
| 17-JUL-1989 | 99 | NB | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | NB | ND | 10.000 | UGL |
| 17-JUL-1989 | JS05 | NI | | 1.930 | UGG |
| 17-JUL-1989 | SS06 | NI | LT | 15.300 | UGL |
| 17-JUL-1989 | JS05 | NI | | 11.100 | UGG |
| 17-JUL-1989 | 99 | NNDMEA | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | NNDMEA | ND | 10.000 | UGL |
| 17-JUL-1989 | 99 | NNDNPA | LT | 0.110 | UGG |
| 17-JUL-1989 | UM13 | NNDNPA | LT | 5.630 | UGL |
| 17-JUL-1989 | 99 | NNDPA | ND | 0.330 | UGG |
| 17-JUL-1989 | UM13 | NNDPA | ND | 6.700 | UGL |
| 17-JUL-1989 | JS05 | PB | LT | 117.000 | UGG |
| 17-JUL-1989 | SD11 | PB | LT | 1.700 | UGL |
| 17-JUL-1989 | JS05 | PB | LT | 96.100 | UGG |
| 17-JUL-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 17-JUL-1989 | 99 | PCB016 | ND | 5.000 | UGG |
| 17-JUL-1989 | UM13 | PCB016 | ND | 30.000 | UGL |
| 17-JUL-1989 | UH09 | PCB016 | LT | 0.133 | UGL |
| 17-JUL-1989 | LH08 | PCB016 | LT | 0.092 | UGG |
| 17-JUL-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 17-JUL-1989 | 99 | PCB221 | ND | 5.000 | UGG |
| 17-JUL-1989 | UM13 | PCB221 | ND | 30.000 | UGL |
| 17-JUL-1989 | UH09 | PCB221 | ND | 0.500 | UGL |
| 17-JUL-1989 | LH08 | PCB221 | ND | 0.080 | UGG |
| 17-JUL-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 17-JUL-1989 | 99 | PCB232 | ND | 5.000 | UGG |
| 17-JUL-1989 | UM13 | PCB232 | ND | 30.000 | UGL |
| 17-JUL-1989 | UH09 | PCB232 | ND | 0.500 | UGL |
| 17-JUL-1989 | LH08 | PCB232 | ND | 0.080 | UGG |
| 17-JUL-1989 | LH08 | PCB242 | ND | 0.080 | UGG |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | 99 | PCB242 | ND | 5.000 | UGG |
| 17-JUL-1989 | UM13 | PCB242 | ND | 30.000 | UGL |
| 17-JUL-1989 | UH09 | PCB242 | ND | 0.500 | UGL |
| 17-JUL-1989 | LH08 | PCB242 | ND | 0.080 | UGG |
| 17-JUL-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 17-JUL-1989 | 99 | PCB248 | ND | 5.000 | UGG |
| 17-JUL-1989 | UM13 | PCB248 | ND | 30.000 | UGL |
| 17-JUL-1989 | UH09 | PCB248 | ND | 0.500 | UGL |
| 17-JUL-1989 | LH08 | PCB248 | ND | 0.080 | UGG |
| 17-JUL-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 17-JUL-1989 | 99 | PCB254 | ND | 10.000 | UGG |
| 17-JUL-1989 | UM13 | PCB254 | ND | 60.000 | UGL |
| 17-JUL-1989 | UH09 | PCB254 | ND | 1.000 | UGL |
| 17-JUL-1989 | LH08 | PCB254 | ND | 0.160 | UGG |
| 17-JUL-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 17-JUL-1989 | 99 | PCB260 | ND | 10.000 | UGG |
| 17-JUL-1989 | UM13 | PCB260 | ND | 60.000 | UGL |
| 17-JUL-1989 | UH09 | PCB260 | LT | 0.087 | UGL |
| 17-JUL-1989 | LH08 | PCB260 | LT | 0.065 | UGG |
| 17-JUL-1989 | 99 | PCP | ND | 2.000 | UGG |
| 17-JUL-1989 | UM13 | PCP | ND | 50.000 | UGL |
| 17-JUL-1989 | 99 | PHANTR | LT | 1.600 | UGG |
| 17-JUL-1989 | UM13 | PHANTR | LT | 0.759 | UGL |
| 17-JUL-1989 | 99 | PPDDD | LT | 0.017 | UGG |
| 17-JUL-1989 | 99 | PPDDD | LT | 0.390 | UGG |
| 17-JUL-1989 | UM13 | PPDDD | LT | 5.610 | UGL |
| 17-JUL-1989 | UH09 | PPDDD | LT | 0.013 | UGL |
| 17-JUL-1989 | LH08 | PPDDD | LT | 0.020 | UGG |
| 17-JUL-1989 | 99 | PPDDE | LT | 0.014 | UGG |
| 17-JUL-1989 | 99 | PPDDE | LT | 0.400 | UGG |
| 17-JUL-1989 | UM13 | PPDDE | LT | 11.200 | UGL |
| 17-JUL-1989 | UH09 | PPDDE | LT | 0.022 | UGL |
| 17-JUL-1989 | LH08 | PPDDE | LT | 0.016 | UGG |
| 17-JUL-1989 | 99 | PPDDT | LT | 0.017 | UGG |
| 17-JUL-1989 | 99 | PPDDT | LT | 0.480 | UGG |
| 17-JUL-1989 | UM13 | PPDDT | LT | 5.070 | UGL |
| 17-JUL-1989 | UH09 | PPDDT | LT | 0.037 | UGL |
| 17-JUL-1989 | LH08 | PPDDT | LT | 0.018 | UGG |
| 17-JUL-1989 | 99 | PYR | LT | 0.530 | UGG |
| 17-JUL-1989 | UM13 | PYR | LT | 9.380 | UGL |
| 17-JUL-1989 | JD11 | SB | | 0.654 | UGG |
| 17-JUL-1989 | SD11 | SB | LT | 2.500 | UGL |
| 17-JUL-1989 | JD11 | SB | LT | 0.393 | UGG |
| 17-JUL-1989 | JS05 | SB | ND | 11.000 | UGG |
| 17-JUL-1989 | JD11 | SE | LT | 1.880 | UGG |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | SD11 | SE | LT | 6.940 | UGL |
| 17-JUL-1989 | JD11 | SE | LT | 1.880 | UGG |
| 17-JUL-1989 | JS05 | SE | LT | 103.000 | UGG |
| 17-JUL-1989 | 99 | TCLEA | LT | 7.100 | UGL |
| 17-JUL-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 17-JUL-1989 | 99 | TCLEA | LT | 0.003 | UGG |
| 17-JUL-1989 | 99 | TCLEE | | 0.302 | UGG |
| 17-JUL-1989 | 99 | TCLEE | LT | 2.300 | UGL |
| 17-JUL-1989 | 99 | TCLEE | LT | 0.008 | UGG |
| 17-JUL-1989 | 99 | TCLEE | LT | 0.008 | UGG |
| 17-JUL-1989 | JD11 | TL | LT | 2.150 | UGG |
| 17-JUL-1989 | SS06 | TL | LT | 59.900 | UGL |
| 17-JUL-1989 | JD11 | TL | LT | 2.150 | UGG |
| 17-JUL-1989 | JS05 | TL | LT | 67.600 | UGG |
| 17-JUL-1989 | 99 | TRCLE | LT | 1.000 | UGL |
| 17-JUL-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | TRCLE | LT | 0.002 | UGG |
| 17-JUL-1989 | 99 | TXPHEN | ND | 0.160 | UGG |
| 17-JUL-1989 | 99 | TXPHEN | ND | 10.000 | UGG |
| 17-JUL-1989 | UM13 | TXPHEN | ND | 60.000 | UGL |
| 17-JUL-1989 | UH09 | TXPHEN | ND | 1.000 | UGL |
| 17-JUL-1989 | LH08 | TXPHEN | ND | 0.160 | UGG |
| 17-JUL-1989 | 99 | UNK519 | | 0.379 | UGG |
| 17-JUL-1989 | 99 | UNK524 | | 0.348 | UGG |
| 17-JUL-1989 | 99 | UNK524 | | 0.423 | UGG |
| 17-JUL-1989 | 99 | UNK528 | | 4.710 | UGG |
| 17-JUL-1989 | 99 | UNK530 | | 0.537 | UGG |
| 17-JUL-1989 | 99 | UNK531 | | 0.435 | UGG |
| 17-JUL-1989 | 99 | UNK535 | | 0.471 | UGG |
| 17-JUL-1989 | UM13 | UNK536 | | 11.200 | UGL |
| 17-JUL-1989 | 99 | UNK538 | | 0.581 | UGG |
| 17-JUL-1989 | 99 | UNK538 | | 0.648 | UGG |
| 17-JUL-1989 | UM13 | UNK538 | | 10.700 | UGL |
| 17-JUL-1989 | 99 | UNK539 | | 0.315 | UGG |
| 17-JUL-1989 | UM13 | UNK541 | | 35.700 | UGL |
| 17-JUL-1989 | UM13 | UNK542 | | 6.890 | UGL |
| 17-JUL-1989 | UM13 | UNK542 | | 7.830 | UGL |
| 17-JUL-1989 | UM13 | UNK543 | | 6.100 | UGL |
| 17-JUL-1989 | UM13 | UNK544 | | 18.100 | UGL |
| 17-JUL-1989 | 99 | UNK545 | | 1.190 | UGG |
| 17-JUL-1989 | 99 | UNK601 | | 0.500 | UGG |
| 17-JUL-1989 | 99 | UNK609 | | 0.398 | UGG |
| 17-JUL-1989 | 99 | UNK617 | | 0.320 | UGG |
| 17-JUL-1989 | 99 | UNK619 | | 1.280 | UGG |
| 17-JUL-1989 | 99 | UNK628 | | 0.709 | UGG |

TABLES (cont.)

Site: METHOD BLANK

| SAMPLE DATE | TEST METHOD | COMPOUND | BOOL | CONCENTRATION | UNITS |
|----------------|----------------|----------|------|---------------|-------|
| 17-JUL-1989 | 99 | UNK629 | | 2.580 | UGG |
| 17-JUL-1989 | 99 | UNK641 | | 0.473 | UGG |
| 17-JUL-1989 | JS05 | ZN | | 60.600 | UGG |
| 17-JUL-1989 | SS06 | ZN | LT | 5.440 | UGL |
| 17-JUL-1989 | JS05 | ZN | | 58.700 | UGG |

AEHA DATA

| | | | | |
|--------------|--------|---------------------------|--|-------------------|
| GAITHERSBURG | | SAMPLING 16 DEC 1983 | | 122205164/ |
| ARMY RESERVE | | DATE ANALYSIS 22 DEC 1983 | | MS FILE 122205165 |
| SAMPLE | CENTER | | | |

| <u>COMPOUND</u> | <u>AQAD #</u> <u>SAMPLE #</u> | <u>D5164</u> <u>83-41a</u> | <u>D5165</u> <u>83-41b</u> |
|-----------------------------|----------------------------------|-------------------------------|-------------------------------|
| BENZENE | | <3 | <3 |
| BROMOMETHANE | | <3 | <3 |
| BROMODICHLOROMETHANE | | <3 | <3 |
| BROMOFORM | | <3 | <3 |
| CARBON TETRACHLORIDE | | <3 | <3 |
| CHLOROBENZENE | | <3 | <3 |
| CHLOROETHANE | | <3 | <3 |
| 2-CHLOROETHYL VINYL ETHER | | <3 | <3 |
| CHLOROFORM | | <3 | <3 |
| CHLOROMETHANE | | <3 | <3 |
| DIBROMOCHLOROMETHANE | | <3 | <3 |
| 1,1-DICHLOROETHANE | | <3 | <3 |
| 1,2-DICHLOROETHANE | | <3 | <3 |
| 1,1-DICHLOROETHENE | | <3 | <3 |
| 1,2-DICHLOROETHENE (TRANS) | | <3 | <3 |
| 1,2-DICHLOROPROPANE | | <3 | <3 |
| 1,3-DICHLOROPROPENE (CIS) | | <3 | <3 |
| 1,3-DICHLOROPROPENE (TRANS) | | <3 | <3 |
| ETHYLBENZENE | | <3 | <3 |
| METHYLENE CHLORIDE | | <3 | <3 |
| 1,1,2,2-TETRACHLOROETHANE | | <3 | <3 |
| TETRACHLOROETHYLENE | | <3 | <3 |
| 1,1,1-TRICHLOROETHANE | | <3 | <3 |
| 1,1,2-TRICHLOROETHANE | | <3 | <3 |
| TRICHLOROETHYLENE | | <3 | <3 |
| TRICHLOROFLUOROMETHANE | | <3 | <3 |
| TOLUENE | | <3 | <3 |
| VINYL CHLORIDE | | <3 | <3 |
| OTHER COMPOUNDS: | | NONE | NONE |

Notes

Samples 83-41a was collected from an inlet valve to pressure tank at potable well head.

Sample 83-41b was collected from the cold-water tap in the men's latrine at the engine and frequency changer building.

RUN DATE: 16Feb84

RADIOLOGICAL AND INORGANIC CHEMISTRY DIVISION

Proj. Officer: Runyon

Division: WQED

Installation: Gaithersburg

Timekeeping #: 31

Sample Description: Treated H2O

Remarks: Sample ID not legible.

Date Received: 23DEC83

Date Reviewed: 16FEB84

| | | | | |
|----------|--------|---------|--------|--------|
| | | pH | F | AQA0# |
| | | Method# | 105A02 | 230B02 |
| SPL ID | Lab# | pH | mg/L | |
| 83-41C | TW 293 | 6.7 | <.1 | D5166 |
| Analyst | | DR | MH | |
| DateComp | | | | |

USAEHA

Proj. Officer: Runyon

Installation: Gaithersburg

Sample Description: Potable Water

Remarks:

Date Received: 22DEC83

Date Reviewed: 23JAN84

| | | Fe | Zn | Cu |
|--------------|----------|--------|--------|--------|
| | Method # | 501C08 | 501C08 | 501C08 |
| SPL ID | Lab# | mg/L | mg/L | mg/L |
| D5166 83-41C | TW823 | 13.7 | 4.19 | <.025 |
| Analyst | | GM | GM | GM |

USAR Center
8510 Snouffers School Road
Gaithersburg, Maryland 20760

Bldg. 14-1, Water Sample Data

Field Analysis

| | |
|-------------------|-----|
| pH | 6.2 |
| Chlorine Residual | 0 |

Lab Analysis

Bacteriological
Coliform Colonies (per 100 ml) - 0

Chemical

| | |
|----------|-----------|
| pH | 6.5 |
| Copper | 0.03 mg/l |
| Zinc | 7.3 mg/l |
| Iron | 0.74 mg/l |
| Fluoride | 0.20 mg/l |

Incl 1

APPENDIX E
CHEMICAL COMPOUND ABBREVIATIONS

**** TEST NAME ****

| | |
|---------------|---------------|
| ABBREVIATION: | ELEMENT NAME: |
| ----- | ----- |
| TEST NAME | TEST NAME |

| | | |
|--|-------|----------|
| ELEMENT IS USED IN THE FOLLOWING IR FILES: | DB#: | DB NAME: |
| ----- | ----- | ----- |
| CHEMICAL (89-94) | C301 | IR |

ELEMENT SIZE AND CHARACTERISTICS:

6 (ALPHANUMERIC) LEFT JUSTIFY

ELEMENT DESCRIPTION:

UP TO 6 CHARACTERS (NUMBERS AND LETTERS) TO IDENTIFY THE PARAMETER BEING MEASURED.

NOTE: FOR UNKNOWN COMPOUNDS, USE THE CODE UNKXXX WHERE XXX IS THE NUMBER OF MINUTES FOR THE RETENTION TIME MULTIPLIED BY TEN. THE NUMBERS ARE FULL FIELD SO THAT UNKNOWN #1 WOULD BE EXPRESSED AS UNK001 WITH THE ZEROS INCLUDED. A RETENTION TIME OF 3.2 MINUTES MULTIPLIED BY TEN WOULD BE 32 AND REPORTED AS UNK032.

ACCEPTABLE CRITERIA:

- REQUIRED ON ALL CHEMICAL RECORDS
- MUST MATCH ONE OF THE ACCEPTABLE CODES BELOW
- FOR UNKNOWN, MUST BE WITHIN THE RANGE OF UNK001 THRU UNK999
- LAB MUST BE CERTIFIED IN THE METHOD CERTIFICATION TABLE FOR THE SPECIFIC TEST NAME EXCEPT FOR THE FOLLOWING TEST NAMES:
PH, COND, TEMP, OILGR, BOD, COD, TOC, HARD, ASBEST, TSS
- LAB DOES NOT REQUIRE CERTIFICATION FOR A SPECIFIC TEST NAME FOR METHOD NUMBER OF 99 OR MEASUREMENT BASED ON INTERNAL STANDARD

ACCEPTABLE ENTRIES AND CONDITIONS:

(ALPHABETIC SORT BY CODES)

| | |
|--------|---|
| AACHXE | ACETIC ACID, CYCLOHEXYL ESTER |
| ABHC | ALPHA-BENZENEHEXACHLORIDE / ALPHA-HEXACHLOROCYCLOHEXANE |
| AC | HYDROGEN CYANIDE / HYDROCYANIC ACID |
| ACDHMW | *ACIDS (HIGH MOLECULAR WEIGHT) |
| ACET | ACETONE |
| ACEE | ANTICHOLINESTERASE |
| ACIDIT | *ACIDITY |
| ACND10 | ACENAPHTHENE-D10 |
| ACPHN | ACETOPHENONE |
| ACROLN | ACROLEIN |
| ACRYLO | ACRYLONITRILE |
| ADHP | AMMONIUM DIHYDROGEN PHOSPHATE |
| AENSLE | ALPHA-ENDOSULFAN / ENDOSULFAN I |
| AG | SILVER |

| | |
|--------|---|
| AL | ALUMINUM |
| ALAL | *ALIPHATIC ALCOHOLS |
| ALDEHY | *ALDEHYDES |
| ALDRN | ALDRIN |
| ALHC | *ALIPHATIC HYDROCARBONS |
| ALHMW | *ALCOHOLS (HIGH MOLECULAR WEIGHT) |
| ALK | *ALKALINITY |
| ALKBIC | *ALKALINITY, BICARBONATE |
| ALKCAR | *ALKALINITY, CARBONATE |
| ALKHYD | *ALKALINITY, HYDROXIDE |
| ALKN | *ALKANES |
| ANAPNE | ACENAPHTHENE |
| ANAPYL | ACENAPHTHYLENE |
| ANELNT | *ANION ELUENT |
| ANIL | ANILINE |
| ANTRC | ANTHRACENE |
| ANTRCN | 9-ANTHRACENECARBONITRILE |
| ANTRQU | ANTHRAQUINONE / 9,10-ANTHRACENEDIONE |
| AS | ARSENIC |
| ASBEST | ASBESTOS |
| ASEXT | *ARSENIC, EXTRACTABLE |
| ASTOT | *ARSENIC, TOTAL |
| ATNBA | 2,4,6-TRINITROBENZALDEHYDE |
| ATZ | ATRAZINE |
| AYLETH | ALLYL ETHER |
| AZACN | AZACYLONONANE |
| B | BORON |
| BA | BARIUM |
| BAANTR | BENZO [A] ANTHRACENE |
| BAHXE | BUTANOIC ACID, 1-HEXYL ESTER |
| BAPYR | BENZO [A] PYRENE |
| BBFANT | BENZO [B] FLUORANTHENE |
| BBFLRE | BENZO [B] FLUORENE |
| BBHC | BETA-BENZENEHEXACHLORIDE / BETA-HEXACHLOROCYCLOHEXANE |
| BBNTHP | BENZO [B] NAPHTHO [1,2-D] THIOPHENE |
| BBZP | BUTYLBENZYL PHTHALATE |
| BCHPD | BICYCLO [2,2,1] HEPTA-2,5-DIENE |
| BCLME | BIS (CHLOROMETHYL) ETHER |
| BCMSO | BIS (CARBOXYMETHYL) SULFOXIDE |
| BCMSO2 | BIS (CARBOXYMETHYL) SULFONE |
| BCPHCE | 2,2-BIS (CHLOROPHENYL) CHLOROETHYLENE |
| BCY3HX | BICYCLO [3,1,0] HEXANE |
| BDADME | BUTANEDIOIC ACID, DIMETHYL ESTER |
| BE | BERYLLIUM |
| BEETO | 1-(2-BUTOXYETHOXY) ETHANOL |
| BENSLF | BETA-ENDOSULFAN / ENDOSULFAN II |
| BENZA | BENZANTHRONE |
| BENZAL | BENZALDEHYDE |
| BENZID | BENZIDINE |
| BENZOA | BENZOIC ACID |
| BEP | 2-BUTOXYETHANOL PHOSPHATE |
| BF2ANT | BENZOBIFLUOROANTHENE |
| BGHIFA | BENZO [G,H,I] FLUOROANTHENE |
| BGHIPY | BENZO [G,H,I] PERYLENE |
| BICYHX | BICYCLOHEXYL |
| BIDBI | 1,5-BIS (1,1-DIMETHYLETHYL)-3,3-DIMETHYLBICYCLO [3.1.0] HEXANE-2-ONE |
| BINAP | BINAPHTHYL |
| BJFANT | BENZO [J] FLUORANTHENE |
| BKFANT | BENZO [K] FLUORANTHENE |

| | |
|--------|--|
| BLDX | SLADEX |
| BMP | BUTYLMETHYL PHTHALATE |
| BOD | *BIOLOGICAL OXYGEN DEMAND |
| BPBG | BUTYLPHTHALYL BUTYLGLYCOLATE |
| BRCLM | BROMOCHLOROMETHANE |
| BRC6H5 | BROMOBENZENE |
| BRDCLM | BROMODICHLOROMETHANE |
| BRMCIL | BROMACIL |
| BTZ | BENZOTHAZOLE |
| BTMSOA | BIS (TRIMETHYLSILYL) OXALIC ACID |
| BUC6H5 | BUTYLBENZENE |
| BUEETH | BUTYLETHYL ETHER |
| BZ | 3-QUINUCLIDINYL BENZILATE |
| BZALC | BENZYL ALCOHOL |
| BZAL2M | ALPHA,ALPHA-DIMETHYLBENZENEMETHANOL |
| BZAPAN | BENZO [A] PHENANTHRENE |
| BZCPAN | BENZO [C] PHENANTHRENE |
| BZFANT | BENZFLUORANTHENE |
| BZHQUN | BENZO [H] QUINOLINE |
| BZOAME | BENZOIC ACID, METHYL ESTER / METHYL BENZOATE |
| BZOTHP | BENZO [B] THIOPHENE |
| BZOTRZ | 1H-BENZOTRIAZOLE / 1,2,3-BENZOTRIAZOLE |
| BZPA | BENZENEPHOSPHONIC ACID |
| BZYLBR | BENZYLBROMIDE / ALPHA-BROMOTOLUENE |
| B2CEXM | BIS (2-CHLOROETHOXY) METHANE |
| B2CIPE | BIS (2-CHLOROISOPROPYL) ETHER |
| B2CLEE | BIS (2-CHLOROETHYL) ETHER |
| B2EHP | BIS (2-ETHYLHEXYL) PHTHALATE |
| CA | CALCIUM |
| CACO3S | *CALCIUM CARBONATE SOLUTION |
| CALLMW | *HYDROCARBONS (ALL MOLECULAR WEIGHTS) |
| CAME | CARBAMIC ACID, METHYL ESTER |
| CAMP | CAMPHOR |
| CAPLCT | CAPROLACTAM / 6-AMINOHEXANOIC ACID LACTAM |
| CARBAZ | 9H-CARBAZOLE |
| CBA | 2-CHLOROBENZALDEHYDE |
| CBCCH | CIS-1-BROMO-2-CHLOROCYCLOHEXANE |
| CBOA | 2-CHLOROBENZOIC ACID |
| CCLF2 | CHLORODIFLUOROMETHANE |
| CCLF3 | TRIFLUOROCHLOROMETHANE |
| CCL2F2 | DICHLORODIFLUOROMETHANE |
| CCL3F | TRICHLOROFLUOROMETHANE |
| CCL4 | CARBON TETRACHLORIDE |
| CC3 | XXCC3 |
| CD | CADMIUM |
| CDACH | CIS-1,2-DIACETOXYCYCLOHEXANE |
| CDCL3 | CHLOROFORM-D |
| CDNBIS | *CHLORODINITROBENZENE ISOMER |
| CD2CL2 | METHYLENE CHLORIDE-D2 |
| CEC | *CATION EXCHANGE CAPACITY |
| CG | PHOSGENE / CARBONYL CHLORIDE |
| CHBR3 | BROMOFORM |
| CHCL3 | CHLOROFORM |
| CHO | 1,2-CYCLOHEXANE OXIDE |
| CHOLA | CHOLESTANE |
| CHONE | CYCLOHEXANONE |
| CHRY | CHRYSENE |
| CH2BR2 | METHYLENE BROMIDE |
| CH2CL2 | METHYLENE CHLORIDE |
| CH3BR | BROMOMETHANE |

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| CH3CL | CHLOROMETHANE |
| CH3CN | ACETONITRILE |
| CK | CYANOGEN CHLORIDE |
| CL | CHLORIDE |
| CLCYHX | CHLOROCYCLOHEXANE |
| CLC2A | CHLOROACETIC ACID |
| CLC6D5 | CHLOROBENZENE-D5 |
| CLC6H5 | CHLOROBENZENE |
| CLD | *CHLORINE DEMAND |
| CLDAN | CHLORDANE |
| CLDEN | CHLORDENE |
| CLNAP | *CHLORO NAPHTHALENES |
| CLO3 | CHLORATE |
| CLP | *CHLORO PHENOLS |
| CLVRA | 2-CHLOROVINYL ARSONIC ACID |
| CLXB | *CHLORINATED BENZENES |
| CLXNAP | *CHLORINATED NAPHTHALENES |
| CL2 | CHLORINE |
| CL2ACN | DICHLOROACETONITRILE |
| CL2BP | *DICHLORO BIPHENYLS |
| CL2BZ | *DICHLORO BENZENES |
| CL2NAP | *DICHLORO NAPHTHALENES |
| CL3BP | *TRICHLORO BIPHENYLS |
| CL3C3E | *TRICHLORO PROPENES |
| CL3NAP | *TRICHLORO NAPHTHALENES |
| CL3P | *TRICHLORO PHENOLS |
| CL4BP | *TETRACHLORO BIPHENYLS |
| CL4NAP | *TETRACHLORO NAPHTHALENES |
| CL5B | PENTACHLOROBENZENE |
| CL5BP | *PENTACHLORO BIPHENYLS |
| CL5ET | PENTACHLOROETHANE |
| CL6BP | *HEXACHLORO BIPHENYLS |
| CL6BZ | HEXACHLOROBENZENE |
| CL6CP | HEXACHLOROCYCLOPENTADIENE |
| CL6ET | HEXACHLOROETHANE |
| CL7BP | *HEPTACHLORO BIPHENYLS |
| CL7NB | *HEPTACHLORO NORBORNADIENES |
| CMONOX | CARBON MONOXIDE |
| CN | CHLOROACETOPHENONE |
| CO | COBALT |
| COD | *CHEMICAL OXYGEN DEMAND |
| COND | *SPECIFIC CONDUCTIVITY |
| COUMRN | COUMARAN / 2,3-DIHYDROBENZOFURAN |
| CO3 | CARBONATE |
| CPCXAL | CYCLOPENTANECARBOXALDEHYDE |
| CPMS | 4-CHLOROPHENYLMETHYL SULFIDE |
| CPMSO | 4-CHLOROPHENYLMETHYL SULFOXIDE |
| CPMSO2 | 4-CHLOROPHENYLMETHYL SULFONE |
| CPO | CYCLOPENTANONE |
| CR | CHROMIUM |
| CRHEX | HEXAVALENT CHROMIUM |
| CRO4 | CHROMATE |
| CS | CESIUM |
| CSOL | *CRESOLS |
| CS2 | CARBON DISULFIDE |
| CU | COPPER |
| CUEXT | *COPPER, EXTRACTABLE |
| CUTOT | *COPPER, TOTAL |
| CX | PHOSGENE OXIME / DICHLOROFORMOXIME |
| CYDODC | CYCLODODECANE |

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| CYHX | CYCLOHEXANE |
| CYHXB | CYCLOHEXYLBENZENE / PHENLYCYCLOHEXANE |
| CYN | CYANIDE |
| CYNF | *CYANIDE, FREE FORM |
| CYOCTE | CYCLOOCTATETRAENE |
| CYPD | CYCLOPENTADIENE |
| CYPNE | CYCLOPENTENE |
| CYSD12 | CHRYSENE-D12 |
| C1ADME | CARBONIC ACID, DIMETHYL ESTER |
| C10 | DECANE |
| C11 | HENDECANE |
| C12 | DODECANE |
| C12AMM | 8-METHYLDECANOIC ACID, METHYL ESTER |
| C12DCE | CIS-1,2-DICHLOROETHENE |
| C13 | TRIDECANE |
| C13DCP | CIS-1,3-DICHLOROPROPYLENE / CIS-1,3-DICHLOROPROPENE |
| C14 | TETRADECANE |
| C14A | TETRADECANOIC ACID / MYRISTIC ACID |
| C14AME | TETRADECANOIC ACID, METHYL ESTER |
| C15 | PENTADECANE |
| C15A | PENTADECANOIC ACID |
| C16 | HEXADECANE |
| C16A | HEXADECANOIC ACID / PALMITIC ACID |
| C16ABE | HEXADECANOIC ACID, BUTYL ESTER |
| C16ADM | HEXADECANOIC ACID, DIMETHYL ESTER |
| C16AEH | HEXADECANOIC ACID, BIS (2-ETHYLHEXYL) ESTER |
| C16AME | HEXADECANOIC ACID, METHYL ESTER |
| C16SAT | *SATURATED HYDROCARBONS (C16) |
| C17 | HEPTADECANE |
| C17AM | HEPTADECANOIC ACID, METHYL ESTER |
| C18 | OCTADECANE |
| C18ABE | OCTADECANOIC ACID, BUTYL ESTER |
| C18AE | OCTADECANOIC ACID, ETHYL ESTER |
| C18AME | OCTADECANOIC ACID, METHYL ESTER |
| C18AOD | OCTADECANOIC ACID, OCTADECYL ESTER |
| C18UNS | *C18H300 UNKNOWN |
| C185FP | BIS (PENTAFLUOROPHENYL) PHENYL PHOSPHINE |
| C19 | NONADECANE |
| C19A | NONADECANOIC ACID |
| C2AEE | ACETIC ACID, ETHYL ESTER / ETHYL ACETATE |
| C2AVE | ACETIC ACID, VINYL ESTER / VINYL ACETATE |
| C2H3CL | CHLOROETHENE / VINYL CHLORIDE |
| C2H5CL | CHLOROETHANE |
| C20 | EICOSANE |
| C21 | HENEICOSANE |
| C22UNS | *C22H400 UNKNOWN |
| C25 | PENTACOSANE |
| C3AME | PROPANOIC ACID, METHYL ESTER |
| C3A2MB | PROPANOIC ACID, 2-METHYLBUTYL ESTER |
| C30AME | TRIACONTANOIC ACID, METHYL ESTER |
| C36 | HEXATRIACONTANE |
| C4 | BUTANE |
| C4HX1L | CIS-4-HEXEN-1-OL |
| C5A | PENTANOIC ACID / VALERIC ACID |
| C6D6 | BENZENE-D6 |
| C6HOH | CYCLOHEXANOL |
| C6H6 | BENZENE |
| C7 | HEPTANE |
| C7A | HEPTANOIC ACID |
| C7NB1 | HEPTACHLORONORBORNENE |

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| C8 | OCTANE |
| C8AME | OCTANOIC ACID, METHYL ESTER |
| C9 | NONANE |
| DBABA | DIBENZ [A,B] ANTHRACENE |
| DBAHA | DIBENZ [A,H] ANTHRACENE |
| DBATTS | 2,4-DIHYDROXYBENZOIC ACID, TRIS-TRIMETHYSILYL |
| DSCP | DIBROMOCHLOROPROPANE |
| DBHC | DELTA-BENZENEHEXACHLORIDE / DELTA-HEXACHLOROCYCLOHEXANE |
| DBRCLM | DIBROMOCHLOROMETHANE |
| DBTSPY | 4,5-DIMETHYL-2,6-BIS (TRIMETHYLSILOXY) PYRIMIDINE |
| DBUCLE | DIBUTYLCHLORENDATE |
| DBZFUR | DIBENZOFURAN |
| DBZTHP | DIBENZOTHIOPHENE |
| DCAMBA | 2-METHOXY-3,6-DICHLOROBENZOIC ACID |
| DCBPH | DICHLOROBENZOPHENONE |
| DCHP | DICYCLOHEXYL PHTHALATE |
| DCMBF | 5,7-DICHLORO-2-METHYLBENZOFURAN |
| DCMPSX | DECAMETHYLCYCLOPENTASILOXANE |
| DCPD | DICYCLOPENTADIENE |
| DDVP | VAPONA |
| DEA | DIETHYLAMINE |
| DECYL3 | DECYLBENZENE |
| DEDMP | DIETHYL DIMETHYL DIPHOSPHONATE |
| DEETH | DIETHYL ETHER |
| DEGLYC | DIETHYLENE GLYCOL / 2,2-OXY BIS [ETHANOL] |
| DEP | DIETHYL PHTHALATE |
| DEPD4 | DIETHYL PHTHALATE-D4 |
| DHBZPY | 3,4-DIHYDRO-2H-1-BENZOPYRAN |
| DHDMAC | 9,10-DIHYDRO-9,9-DIMETHYLACRIDINE |
| DIACAL | DIACETONE ALCOHOL / 4-HYDROXY-4-METHYL-2-PENTANONE |
| DIADS | BIS (DIISOPROPYLAMINO) ETHYLDISULFIDE |
| DIAEL | BIS (DIISOPROPYLAMINO) ETHANOL |
| DIAEP | S-DIISOPROPYLAMINOETHYLMETHYL PHOSPHONOTHIOATE |
| DIAET | BIS (DIISOPROPYLAMINO) ETHANETHIOL |
| DIAS | BIS (DIISOPROPYLAMINO) ETHYLSULFIDE |
| DIASO2 | BIS (DIISOPROPYLAMINO) ETHYLSULFONATE |
| DIAZ | DIAZINON |
| DIBP | DIISOBUTYL PHTHALATE |
| DICLP | *DICHLORO PHENOLS |
| DIDDP | DIISOPROPYL DIMETHYL DIPHOSPHONATE |
| DIH2O | DEIONIZED WATER |
| DIMP | DIISOPROPYLMETHYL PHOSPHONATE |
| DIOP | DIISOOCTYL PHTHALATE |
| DIPETH | DIISOPROPYL ETHER |
| DIPUR | DIISOPROPYL UREA |
| DITH | DITHIANE |
| DLDRN | DIELDRIN |
| DL2HPG | DL-2-(3-HYDROXYPHENYL) GLYCINE |
| DM | ADAMSITE |
| DMCAR | DIMETHYL DITHIOCARBONATE |
| DMCPDE | 1,2-DIMETHYLCYCLOPENTADIENE |
| DMDS | DIMETHYL DISULFIDE |
| DMETH | DIMETHYL ETHER |
| DMIP | DIMETHYL ISOPHTHALATE |
| DMMP | DIMETHYLMETHYL PHOSPHATE |
| DMP | DIMETHYL PHTHALATE |
| DMPCHE | 3-(2,2-DIMETHYLPROPOXY) CYCLOHEXENE |
| DMPTHF | 2,2-DIMETHYL-5-(1-METHYLPROPYL) TETRAHYDROFURAN |
| DMXDMS | DIMETHOXY DIMETHYLSILANE |
| DMIACH | 2,2-DIMETHYL-1-ACETYLCYCLOHEXANE |

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| DNBEE | 1,1-DI-N-BUTYLETHYLENE / 1,1-DI-N-BUTYLETHENE |
| DNBP | DI-N-BUTYL PHTHALATE |
| DNOP | DI-N-OCTYL PHTHALATE |
| DNOPD4 | DI-N-OCTYL PHTHALATE-D4 |
| DNPP | DI-N-PENTYL PHTHALATE |
| DNTISO | *DINITROTOLUENE ISOMER |
| DO | *DISSOLVED OXYGEN |
| DOAD | DIOCTYL ADIPATE |
| DOAZ | DIOCTYL AZELATE |
| DODECB | DODECYLBENZENE |
| DOETH | DIOCTYL ETHER |
| DOPAM | DOPAMINE / 4-(2-AMINOETHYL) PYROCATECHOL |
| DPA | DIPHENYLAMINE |
| DPETH | DIPHENYL ETHER |
| DPETYN | 1,1-(1,2-ETHYNYEDIYL) BIS (BENZENE) |
| DPHNY | DIPHENYL |
| DPNTLL | D-(-)-PANTOLYL LACTONE |
| DPSO | DIPHENYL SULFOXIDE |
| DPSULF | DIPHENYL SULFIDE / 1,1-THIO BIS (BENZENE) |
| DSEDIN | DISELENO DIINDOLE |
| DTB4C | 2,6-DI-TERT-BUTYL-4-CRESOL |
| DTCHBO | 1.ALPHA.(E),4.ALPHA.-1-(1,4-DIHYDROXY-2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)-2-BUTEN-1-ONE |
| DURS | DURBAN |
| DYSCAN | *GC-MS DYE SCAN |
| EBCPGL | ETHYL-2,2-BIS (4-CHLOROPHENYL) GLYCOLATE |
| ED | DICHLOROETHYL ARSINE |
| EDBDAS | 3-PHENYLPROPANOL |
| EICOSL | 1-EICOSANOL |
| EMPA | ETHYLMETHYL PHOSPHONIC ACID / ETHYLMETHYL PHOSPHONATE |
| ENDRN | ENDRIN |
| ENDRNA | ENDRIN ALDEHYDE |
| ENDRNK | ENDRIN KETONE |
| ENHETH | ETHYL-N-HEXYL ETHER |
| ESFSO4 | ENDOSULFAN SULFATE |
| ETBD10 | ETHYLBENZENE-D10 |
| ETCYHX | ETHYLCYCLOHEXANE |
| ETC6H5 | ETHYLBENZENE |
| ETOH | ETHANOL |
| F | FLUORIDE |
| FABPEE | FORMIC ACID, BETA-PHENYLETHYL ESTER |
| FACHXE | FORMIC ACID, CYCLOHEXYL ESTER |
| FANT | FLUORANTHENE |
| FARN | FARNESOL |
| FATAL | *FATTY ALCOHOLS |
| FC2A | FLUOROACETIC ACID |
| FE | IRON |
| FLRENE | FLUORENE |
| FREON | FREON / DICHLOROFLUOROMETHANE |
| F10BP | DECAFLUOROBIPHENYL |
| GA | TABUN / ETHYL-N,N-DIMETHYL PHOSPHORAMIDOCYANIDATE |
| GB | SARIN / ISOPROPYLMETHYL PHOSPHONOFUORIDATE |
| GD | SOMAN / PINACOLYLMETHYL PHOSPHONOFUORIDATE |
| GRNDY | GREEN DYE |
| H | LEVINSTEIN MUSTARD |
| HARD | *TOTAL HARDNESS |
| HCBD | HEXACHLOROBUTADIENE |
| HCNB | HEXACHLORONORBORNADIENE |
| HCO3 | BICARBONATE |
| HD | DISTILLED MUSTARD / BIS (2-CHLOROETHYL) SULFIDE |

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| HEXANE | HEXANE |
| HG | MERCURY |
| HGEXT | *MERCURY, EXTRACTABLE |
| HGTOT | *MERCURY, TOTAL |
| HMTCHE | 2,6,10,15,19,23-HEXAMETHYL-2,6,10,14,18,22-TETRACOSAHEXAENE |
| HMX | CYCLOTETRAMETHYLENETETRAMINE |
| HN | NITROGEN MUSTARD |
| HPCL | HEPTACHLOR |
| HPCLE | HEPTACHLOR EPOXIDE |
| HPLH2O | HPLC GRADE WATER |
| HPO4 | *HYDROLYZABLE PHOSPHATE |
| HWX013 | HALOWAX 1013 |
| HWX099 | HALOWAX 1099 |
| HXAB2E | HEXANEDIOIC ACID, BIS (2-ETHYLHEXYL) ESTER |
| HXADBE | HEXANEDIOIC ACID, DIBUTYL ESTER / DIBUTYL ADIPATE |
| HXADME | HEXANEDIOIC ACID, DIMETHYL ESTER / DIMETHYL ADIPATE |
| HXADOE | HEXANEDIOIC ACID, DIOCTYL ESTER / DIOCTYL ADIPATE |
| HXCOS | HEXACOSANE |
| HXHMAZ | 4,5,6,7,8,8A-HEXAHYDRO-8A-METHYL-2-[1H]-AZULENONE |
| HXMETA | HEXAMETHYLENETETRAMINE / 1,3,5,7-TETRAAZATRICYCLO [3.3.13.7] DECANE |
| HXMTSX | HEXAMETHYLCYCLOTRISILOXANE |
| HYDRND | HYDRINDANE / OCTAHYDRO-1H-INDENE |
| HYDRZ | HYDRAZINE |
| HYNB | 7-HYDROXYNORBORNADIENE |
| H2S | HYDROGEN SULFIDE |
| H3PO4 | PHOSPHORIC ACID |
| ICDPYR | INDENO [1,2,3-C,D] PYRENE |
| IMPA | ISOPROPYLMETHYL PHOSPHONIC ACID / ISOPROPYLMETHYL PHOSPHONATE |
| INDAN | 1-HYDROXY-2,3-METHYLENE INDAN |
| INDENE | INDENE |
| INDOLE | INDOLE / 2,3-BENZOPYRROLE |
| ISODR | ISODRIN |
| ISOPBZ | ISOPROPYLBENZENE / CUMENE |
| ISOPHR | ISOPHORONE |
| ISOQN | ISOQUINOLINE |
| K | POTASSIUM |
| KEND | KETO-ENDRIN |
| L | LEWISITE |
| LACYBB | LACTIC ACID, CYCLIC BUTANEBORONATE |
| LAURIC | LAURIC ACID |
| LIN | LINDANE / GAMA-BENZENEHEXACHLORIDE / GAMMA-HEXACHLOROCYCLOHEXANE |
| LIPID | *% LIPIDS |
| LO | LEWISITE OXIDE |
| MALO | MALONONITRILE |
| MBADOE | 3-METHYLBUTANOIC ACID, 3,7-DIMETHYL-2,4,6-OCTATRIENYL ESTER |
| MBAS | *FOAMING AGENTS / METHYALYNE BLUE ACTIVE SUBSTANCE |
| MBOH | ALPHA-METHYLBENZYL ALCOHOL |
| MBZA | ALPHA-METHYLBENZYL ACETOACETATE |
| MBZCAC | 5-METHYLBENZO [C] ACRIDINE |
| MBZCL | ALPHA-METHYLBENZYL-2-CHLOROACETOACETATE |
| MDCL | 2-METHYLHENDECANAL / 2-METHYLUDECANAL |
| MEAOA | METHYL ARSONIC ACID |
| MEBPIP | 1,1'-METHYLENE BIS [PIPERIDINE] |
| MECC6 | METHYLCYCLOHEXANE |
| MECYBU | METHYLCYCLOBUTANE |
| MECYDC | METHYLCYCLODECANE |
| MECYPE | METHYLCYCLOPENTANE |

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| MEC6D8 | TOLUENE-D8 |
| MEC6H5 | TOLUENE |
| MEHG | METHYL MERCURY |
| MEHGCL | METHYL MERCURY CHLORIDE |
| MEK | METHYLETHYL KETONE / 2-BUTANONE |
| MEOH | METHANOL |
| MEPOH | 2-METHYLPENTANOL |
| MESTOX | MESITYL OXIDE / 4-METHYL-3-PENTEN-2-ONE |
| METLAP | *METHYL NAPHTHALENES |
| MEXCLR | METHOXYCHLOR |
| ME2AEA | DIMETHYL ARSENIC ACID |
| ME2C11 | *DIMETHYL UNDECANES |
| ME2HG | DIMETHYL MERCURY |
| ME2HPL | *METHYL-2-HEPTANOLS |
| ME2HPO | *METHYL-2-HEPTANONES |
| ME2NAP | *DIMETHYL NAPHTHALENES |
| ME3C10 | *TRIMETHYL DECANES |
| ME3C11 | *TRIMETHYL UNDECANES |
| ME3C6 | *TRIMETHYL HEXANES |
| ME3NAP | *TRIMETHYL NAPHTHALENES |
| MG | MAGNESIUM |
| MHYDRZ | METHYLHYDRAZINE |
| MIBK | METHYLISOBUTYL KETONE |
| MIPK | METHYLISOPROPYL KETONE |
| MIREX | MIREX |
| MLTHN | MALATHION |
| MN | MANGANESE |
| MNBK | METHYL-N-BUTYL KETONE / 2-HEXANONE |
| MO | MOLYBDENUM |
| MP | *METHYL PHENOLS |
| MPA | METHYLPHOSPHONIC ACID |
| MPDDD | 2-(META-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE |
| MPK | METHYLPROPYL KETONE / 2-PENTANONE |
| MQFH20 | MILLI-Q-FILTERED WATER |
| MSSCAN | *GC-MS ORGANIC SCAN |
| MTRZL | METRAZOL / CARDIAZOLE |
| NA | SODIUM |
| NAOHME | 50% 1M NaOH - 50% METHANOL |
| NAP | NAPHTHALENE |
| NAPD8 | NAPHTHALENE-D8 |
| NB | NITROBENZENE |
| NBD5 | NITROBENZENE-D5 |
| NBMBSA | N-BUTYL-4-METHYLBENZENESULFONAMIDE |
| NBUETH | N-BUTYL ETHER / 1,1'-OXY BIS (BUTANE) |
| NC | NITROCELLULOSE |
| NCLN | NORTRICYCLANOL |
| NCPPPA | N-(4-CHLOROPHENYL)-3-PHENYL-2-PROPENAMIDE |
| NC1 | NITROCELLULOSE, 12% N |
| NC2 | NITROCELLULOSE, 13.4% N |
| NDHXA | N-NITRO DIHEXYLAMINE |
| NDIOX | NITROGEN DIOXIDE |
| NDMBSA | N,4-DIMETHYLBENZENESULFONAMIDE |
| NDNPA | NITROSO DI-N-PROPYLAMINE |
| NECHXA | N-ETHYLCYCLOHEXYLAMINE |
| NE2PEA | N-ETHYL-2-PROPENAMIDE |
| NG | NITROGLYCERINE |
| NHEDCA | N-(2-HYDROXYETHYL)-DECANAMIDE |
| NH3 | AMMONIA |
| NH3N2 | AMMONIA NITROGEN |

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| NI | NICKEL |
| NIT | *NITRITE, NITRATE-NON SPECIFIC |
| NITARO | *NITRO AROMATICS |
| NMANIL | N-METHYLANILINE |
| NMCANE | N-METHYLCARBAMIC ACID, 1-NAPHTHYL ESTER |
| NMNSOA | N-METHYL-N-NITROSOANILINE |
| NNADME | NONANEDIOIC ACID, DIMETHYL ESTER |
| NNDMA | N,N-DIMETHYLANILINE |
| NNDMEA | N-NITROSO DIMETHYLAMINE |
| NNDNPA | N-NITROSO DI-N-PROPYLAMINE |
| NNDPA | N-NITROSO DIPHENYLAMINE |
| NNPIPA | N-NITROSOPENTYLISOPENTYLAMINE |
| NN4HPL | N-NITROSO-4-HYDROXYPROLINE |
| NO2 | NITRITE |
| NO3 | NITRATE |
| NQ | NITROQUANIDINE |
| N2KJEL | *NITROGEN BY KJELDAHL METHOD |
| OCADME | OCTANEDIOIC ACID, DIMETHYL ESTER |
| ODAPDM | OCTADECANOIC ACID, (2-PHENYL-1,3-DIOXOLAN-4-YL)METHYL ESTER |
| ODECA | OCTADECANOIC ACID / STEARIC ACID |
| ODMSX | OCTADECAMETHYLCYCLONONASILOXANE |
| OEMP | O-ETHYLMETHYL PHOSPHONATE |
| OILGR | *OIL & GREASE |
| OMCTSX | OCTAMETHYLCYCLOTETRASILOXANE |
| OPDDD | 2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE |
| OPDDE | 2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHENE |
| OPDDT | 2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1,1-TRICHLOROETHANE |
| OPO4 | *ORGANOPHOSPHATES |
| QXAT | 1,4-OXATHIANE |
| OXCN | OXACYCLONONANE |
| OZONE | OZONE |
| PAD4NE | PHOSPHORIC ACID, DIETHYL-4-NITROPHENYL ESTER |
| PAH | *POLYNUCLEAR AROMATIC HYDROCARBONS |
| PAODPE | PHOSPHORIC ACID, OCTYL DIPHENYL ESTER |
| PARTIC | *PARTICULATE MATTER |
| PATBUE | PROPANOIC ACID, T-BUTYL ESTER |
| PATPE | PHOSPHORIC ACID, TRIPHENYL ESTER |
| PA2HDE | PROPANOIC ACID, 2-HYDROXYDECYL ESTER |
| PA2MBE | PENTANOIC ACID, 2-METHYLBUTYL ESTER |
| PB | LEAD |
| PBSTY | LEAD STYPHNATE |
| PCB016 | PCB 1016 |
| PCB221 | PCB 1221 |
| PCB232 | PCB 1232 |
| PCB242 | PCB 1242 |
| PCB248 | PCB 1248 |
| PCB254 | PCB 1254 |
| PCB260 | PCB 1260 |
| PCB262 | PCB 1262 |
| PCP | PENTACHLOROPHENOL |
| PCYMEN | 4-CYMEANE / 4-(1-METHYLETHYL) TOLUENE |
| PD | DICHLOROPHENYL ARSINE |
| PDMSLX | POLYDIMETHYL SILOXANE / DIMETHYLPOLY SILOXANE |
| PEGE | *POLYETHYLENEGLYCOL ETHERS |
| PENAMD | N-PENTAMIDE |
| PENTAN | PENTANE |
| PETN | PENTAERYTHRITOL TETRANITRATE |

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| PFP | PENTAFLUOROPHENOL |
| PH | *PH |
| PHAD10 | PHENANTHRENE-D10 |
| PHANTR | PHENANTHRENE |
| PHENAA | PHENYLACETIC ACID |
| PHEND5 | PHENOL-D5 |
| PHEND6 | PHENOL-D6 |
| PHENLC | *PHENOLICS (NON-SPECIFIC) |
| PHENOL | PHENOL |
| PHTHA | PHTHALIC ACID / 1,2-BENZENEDICARBOXYLIC ACID |
| PHTHL | *PHTHALATES |
| PHXAA | PHENOXYACETIC ACID |
| PHYCP | 1,2,3,4,5-PENTAHYDROXYCYCLOPENTANE |
| PIPER | PIPERIDINE |
| POX | *PURGEABLE ORGANIC HALOGENS |
| PO4 | PHOSPHATE |
| PO4ORT | ORTHOPHOSPHATE |
| PPDDD | 2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE |
| PPDDE | 2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE |
| PPDDT | 2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE |
| PPTDE | 2,2-BIS (PARA-CHLOROPHENYL)-2-PHENYL-1,1-DICHLOROETHENE |
| PRC6H5 | PROPYLBENZENE |
| PRTHN | PARATHION |
| PYLD12 | PERYLENE-D12 |
| PYR | PYRENE |
| PYRD10 | PYRENE-D10 |
| P4 | PHOSPHORUS |
| RDX | CYCLOTRIMETHYLENETRINITRAMINE / CYCLONITE |
| REDDY | RED DYE |
| RESACI | *RESIN ACIDS |
| S | SULFUR |
| SB | ANTIMONY |
| SCN | THIOCYANATE |
| SE | SELENIUM |
| SIL | SILICONE |
| SILVEX | SILVEX |
| SN | TIN |
| SO3 | SULFITE |
| SO4 | SULFATE |
| SPIRO | (1',5 TRANS)-7-CHLORO-6-HYDROXY-2',4-DIMETHOXY-6'-METHYL- SPIRO [BENZOFURAN-2-(3H)-1'-(2)-CYCLOHEXENE]-3,4'-DIONE |
| SQUAL | SQUALENE |
| SR | STRONTIUM |
| STERO | *STERIODS |
| STIGMA | STIGMASTENAL |
| STYPH | STYPHNATE ION |
| STYPHA | STYPHNIC ACID |
| STYR | STYRENE |
| SUADME | SULFURIC ACID, DIMETHYL ESTER |
| SULFID | SULFIDE |
| SUPONA | SUPONA / 2-CHLORO-1-(2,4-DICHLOROPHENYL) VINYL DIETHYL PHOSPHATE |
| S2CL2 | SULFUR MONOCHLORIDE |
| TBA | TRIBUTYLAMINE |
| TBASDE | THIOBUTYRIC ACID, S-DECYL ESTER |
| TBP | TRIBUTYL PHOSPHATE |
| TCB | *TETRCCHLORO BENZENES |
| TCB1 | 1,2,4,5-TETRACHLOROBENZENE |
| TCB2 | 1,2,3,4-TETRACHLOROBENZENE |
| TCB3 | 1,2,3,5-TETRACHLOROBENZENE |

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| TCDD | 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN / DIOXIN |
| TCHDCS | TRANS-1,2-CYCLOHEXANDIOL, CYCLIC SULFITE |
| TCLEA | 1,1,2,2-TETRACHLOROETHANE |
| TCLEE | TETRACHLOROETHYLENE / TETRACHLOROETHENE |
| TCLTFE | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE |
| TCOS | TETRACOSANE |
| TCSAME | 15-TETRACOSENOIC ACID, METHYL ESTER |
| TCST | *TRICHLORO STYRENES |
| TDGCL | THIODIGLYCOL |
| TDGCLA | THIODIGLYCOLIC ACID |
| TDMHSX | TETRADECAMETHYL HEXASILOXANE |
| TDODTL | TERT-DODECANETHIOL |
| TDS | *TOTAL DISSOLVED SOLIDS |
| TEGLME | TRIETHYLENE GLYCOL, METHYL ETHER |
| TEGLYC | TRIETHYLENE GLYCOL / 2,2'-[1,2-ETHANEDIYL BIS (OXY)] BIS [ETHANOL] |
| TEMP | *TEMPERATURE |
| TEPO4 | TRIETHYL PHOSPHATE |
| TETPT | *TETRACHLORO CYCLOPENTENES |
| TETR | TETRAZENE |
| TETRYL | N-METHYL-N,2,4,6-TETRANITROANILINE / NITRAMINE |
| TFAAPE | TRIFLUOROACETIC ACID, 1,5-PENTANEDIYL ESTER |
| TFDCLE | 1,1,2-TRIFLUORO-1,2-DICHLOROETHANE |
| TGLYME | TETRAGLYME |
| THF | TETRAHYDROFURAN |
| THNAP | 1,2,3,4-TETRAHYDRONAPHTHALENE / TETRALIN |
| THP2ML | TETRAHYDROPYRANYL-2-METHANOL |
| TL | THALLIUM |
| TMHPDO | 3,3,6-TRIMETHYL-1,5-HEPTADIEN-4-ONE |
| TMHXL | 3,5,5-TRIMETHYL-1-HEXANOL |
| TMODEO | 2,2,7,7-TETRAMETHYL-4,5-OCTADIEN-3-ONE |
| TMPHAN | TETRAMETHYLPHENANTHRENE |
| TMPO3 | TRIMETHYL PHOSPHITE |
| TMPO4 | TRIMETHYL PHOSPHATE |
| TMTCON | 3,5,24-TRIMETHYLTETRACONTANE |
| TMUR | TETRAMETHYLUREA |
| TM3PL | 2,3,4-TRIMETHYL-3-PENTANOL |
| TNBISO | *TRINITROBENZENE ISOMER |
| TNTISO | *TRINITROTOLUENE ISOMER |
| TOC | *TOTAL ORGANIC CARBON |
| TOTDDT | *TOTAL VALUE OF ALL DDT, DDE, DDD ISOMERS |
| TOTGAF | *TOTAL GRAVIMETRIC, ACID FRACTION |
| TOTHG2 | *TOTAL MERCURY |
| TOTPCB | *TOTAL PCBS |
| TOX | *TOTAL ORGANIC HALOGENS |
| TPH | THIOPHENE |
| TPO4 | *TOTAL PHOSPHATES |
| TRCLE | TRICHLOROETHYLENE / TRICHLOROETHENE |
| TRIBZ | *TRICHLORO BENZENES |
| TRIMBZ | *TRIMETHYL BENZENES |
| TRIPT | TRICHLOROCYCLOPENTENE |
| TRMTDE | 2,3,4-TRIMETHYL-4-TETRADECENE |
| TRPD14 | TERPHENYL-d14 |
| TRPHEN | TRIPHENYLENE |
| TRXMET | *TRIALO METHANES |
| TS | *TOTAL SULFUR |
| TSAPHE | 4-TOLUENESULFONIC ACID, HEPTYL ESTER |
| TSS | *TOTAL SUSPENDED SOLIDS |
| TVS | *TOTAL VOLATILE SOLIDS |
| TXPHEN | TOXAPHENE |

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| T1B2BC | TRANS-1-BROMO-2-BUTYLCYCLOPROPANE |
| T12DCE | TRANS-1,2-DICHLOROETHYLENE / TRANS-1,2-DICHLOROETHENE |
| T13DCP | TRANS-1,3-DICHLOROPROPENE |
| T2DEC | TRANS-2-DECENE |
| UDMH | UNSYMMETRICAL DIMETHYL HYDRAZINE |
| UNKXXX | *UNKNOWN COMPOUND, XXX = 001 THRU 999 |
| V | VANADIUM |
| VARHY | *VARIOUS HYDROCARBONS WITH INCREASING M.W. |
| VFA | VINYL FORMATE |
| VM | O-ETHYL-S-(2-DIETHYLAMINOETHYL) METHYL PHOSPHONOTHIOLATE |
| VX | O-ETHYL-S-(2-DIISOPROPYLAMINOETHYL) METHYLPHOSPHONOTHIOLATE |
| WP | WHITE PHOSPHORUS |
| XPLOSV | *EXPLOSIVE SPRAY |
| XYLEN | *XYLENES |
| YELDY | YELLOW DYE |
| ZN | ZINC |
| ZR | ZIRCONIUM |
| 01NHCL | 0.1 N HYDROCHLORIC ACID |
| 1A3MPZ | 1-ACETYL-3-METHYL-5-PYRAZOLONE |
| 1A4HMB | 1-ACETYL-4-(1-HYDROXY-1-METHYLETHYL) BENZENE |
| 1BY4HB | 1-BENZYL-4-HYDROXYBENZIMIDAZOLE |
| 1CDMPZ | 1-CARBAMOYL-3,5-DIMETHYL-2-PYRAZOLINE |
| 1CLODC | 1-CHLOROOCATADECANE |
| 1CL24H | 1-CHLORO-2,4-HEXADIENE |
| 1C3L | 1-PROPANOL |
| 1C4L | 1-BUTANOL |
| 1DODCL | 1-DODECANOL |
| 1EHB | 1-ETHYLHEXYLBENZENE |
| 1EPB | 1-ETHYLPROPYLBENZENE |
| 1E2MB | 1-ETHYL-2-METHYLBENZENE |
| 1E24DB | 1-ETHYL-2,4-DIMETHYLBENZENE |
| 1FNAP | 1-FLUORONAPHTHALENE |
| 1HPDOL | 1-HEPTADECANOL |
| 1HXE | 1-HEXENE |
| 1HX3OL | 1-HEXEN-3-OL |
| 1MBAAN | 1-METHYLBENZ [A] ANTHRACENE |
| 1MCPNE | 1-METHYLCYCLOPENTENE |
| 1MDB | 1-METHYLDECYLBENZENE |
| 1MECHX | 1-METHYLETHYLCYCLOHEXANE |
| 1MECPR | 1-METHYLETHYLCYCLOPROPANE |
| 1MEIND | 1-METHYLINDAN |
| 1MFLRE | 1-METHYL-9H-FLUORENE |
| 1MNAP | 1-METHYLNAPHTHALENE |
| 1MNB | 1-METHYLNONYLBENZENE |
| 1MPRB | (1-METHYLPROPYL) BENZENE |
| 1MPYR | 1-METHYLPYRENE |
| 1MX1PE | 1-METHOXY-1-PROPENE |
| 1M2PEC | 1-METHYL-2-(2-PROPENYL) CYCLOPENTANE |
| 1M7MEN | 1-METHYL-7-(1-METHYLETHYL) NAPHTHALENE |
| 1NHP | 1-NITROHEPTANE |
| 1NKCL | 1.0 N POTASSIUM CHLORIDE |
| 1N2ONE | 1-NITRO-2-OCTANONE |
| 1OCTOL | 1-OCTANOL |
| 1PECHX | 1-PROPENYLCYCLOHEXANE |
| 1PNAP | 1-PHENYLNAPHTHALENE |
| 1TBCHA | 1-T-BUTYLCYCLOHEXANECARBOXYLIC ACID |
| 10CUDM | 10-CYCLOPENTYLUDECANOIC ACID, METHYL ESTER |
| 10MEOH | 10% METHANOL |
| 10MUDM | 10-METHYLUDECANOIC ACID, METHYL ESTER |
| 10OEME | 10-OCTADECENOIC ACID, METHYL ESTER |

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| 11C1PE | 1,1-DICHLORO-1-PROPENE |
| 11DCE | 1,1-DICHLOROETHYLENE / 1,1-DICHLOROETHENE |
| 11DCLE | 1,1-DICHLOROETHANE |
| 11DMEB | (1,1-DIMETHYLETHYL) BENZENE |
| 11DPH | 1,1-DIPHENYLHYDRAZINE |
| 111TCE | 1,1,1-TRICHLOROETHANE |
| 112TCE | 1,1,2-TRICHLOROETHANE |
| 113MCH | 1,1,3-TRIMETHYLCYCLOHEXANE |
| 12DBD4 | 1,2-DICHLOROBENZENE-D4. |
| 12DBRE | 1,2-DIBROMOETHANE |
| 12DCD4 | 1,2-DICHLOROETHANE-D4 |
| 12DCE | *1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS) |
| 12DCLB | 1,2-DICHLOROBENZENE |
| 12DCLE | 1,2-DICHLOROETHANE |
| 12DCLP | 1,2-DICHLOROPROPANE |
| 12DMB | 1,2-DIMETHYLBENZENE / O-XYLENE |
| 12DNAP | 1,2-DIMETHYLNAPHTHALENE |
| 12DPB | 1,2-DIPHENYLBENZENE |
| 12DPH | 1,2-DIPHENYLHYDRAZINE |
| 12EPCH | 1,2-EPOXYCYCLOHEXENE / CYCLOHEXENE OXIDE |
| 12EPEB | 1,2-EPOXYETHYLBENZENE / STYRENE OXIDE |
| 12MTDM | 12-METHYLTETRADECANOIC ACID, METHYL ESTER |
| 12TMCP | 1,1,2,2-TETRAMETHYLCYCLOPROPANE |
| 123CPR | 1,2,3-TRICHLOROPROPANE |
| 123MCH | 1,2,3-TRIMETHYLCYCLOHEXANE |
| 123TCB | 1,2,3-TRICHLOROBENZENE |
| 123TMB | 1,2,3-TRIMETHYLBENZENE |
| 1234MB | 1,2,3,4-TETRAMETHYLBENZENE |
| 124MCH | 1,2,4-TRIMETHYLCYCLOHEXANE |
| 124TCB | 1,2,4-TRICHLOROBENZENE |
| 124TMB | 1,2,4-TRIMETHYLBENZENE |
| 13CPDO | 1,3-CYCLOPENTADIONE |
| 13DBD4 | 1,3-DICHLOROBENZENE-D4 |
| 13DCLB | 1,3-DICHLOROBENZENE |
| 13DCP | 1,3-DICHLOROPROPANE |
| 13DCPE | 1,3-DICHLOROPROPENE |
| 13DEB | 1,3-DIETHYLBENZENE |
| 13DFB | 1,3-DIFLUOROBENZENE |
| 13DMB | 1,3-DIMETHYLBENZENE / M-XYLENE |
| 13DMBB | (1,3-DIMETHYLBUTYL) BENZENE |
| 13DMCH | 1,3-DIMETHYLCYCLOHEXANE |
| 13DNAP | 1,3-DIMETHYLNAPHTHALENE |
| 13DNB | 1,3-DINITROBENZENE |
| 13DPPR | 1,3-DIPHENYLPROPANE / 1,1'-(1,3-PROPANEDIYL) BIS [BENZENE- |
| 13TDAM | 13-TETRADECYNOIC ACID, METHYL ESTER |
| 135MCH | 1,3,5-TRIMETHYLCYCLOHEXANE |
| 135TMB | 1,3,5-TRIMETHYLBENZENE |
| 135TNB | 1,3,5-TRINITROBENZENE |
| 14DACB | 1,4-DIACETYLBENZENE |
| 14DBD4 | 1,4-DICHLOROBENZENE-D4 |
| 14DCBU | 1,4-DICHLOROBUTANE |
| 14DCLB | 1,4-DICHLOROBENZENE |
| 14DFB | 1,4-DIFLUOROBENZENE |
| 14DIOX | 1,4-DIOXANE |
| 14DMCH | 1,4-DIMETHYLCYCLOHEXANE |
| 14DMNP | 1,4-DIHYDRO-1,4-METHANONAPHTHALENE |
| 14DMXA | 1,4-DIMETHOXYANTHRACENE |
| 14DNB | 1,4-DINITROBENZENE |
| 14D2EB | 1,4-DIMETHYL-2-ETHYLBENZENE |
| 14HXDE | 1,4-HEXADIENE |

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| 14MPME | 14-METHYLPENTADECANIC ACID, METHYL ESTER |
| 15DNAP | 1,5-DIMETHYLNAPHTHALENE |
| 15MRME | 15-METHYLHEXADECANOIC ACID, METHYL ESTER |
| 16DMIN | 1,6-DIMETHYLINDAN |
| 16DNAP | 1,6-DIMETHYLNAPHTHALENE |
| 16MHME | 16-METHYLHEPTADECANOIC ACID, METHYL ESTER |
| 167TMN | 1,6,7-TRIMETHYLNAPHTHALENE |
| 17PTCE | 17-PENTATRIACONTENE |
| 18DNAP | 1,8-DIMETHYLNAPHTHALENE |
| 18018D | 1,2,3,4,4A,5,8,8A-OCTAHYDRO-1,4,5,8-DIMETHANOLNAPHTHALEN-2-OL |
| 2A46DA | 2-AMINO-4,6-DINITROANILINE |
| 2A46DT | 2-AMINO-4,6-DINITROTOLUENE |
| 2BEETO | 2-(2-N-BUTOXYETHOXY) ETHANOL |
| 2BEMDE | 2,2-BIS (ETHYLMERCAPTO) DIETHYL ETHER |
| 2BMMPR | 2,2-BIS (METHYLMERCAPTO) PROPANE |
| 2BNMNM | 2-BUTYL-N-METHYLNORLEUCINE, METHYL ESTER |
| 2BREXA | 2-BROMOHEXANOIC ACID |
| 2BUTHF | 2-BUTYLTETRAHYDROFURAN |
| 2BUXEL | 2-BUTOXYETHANOL |
| 2B1CP | 2-BROMO-1-CHLOROPROPANE |
| 2B1OOL | 2-BUTYL-1-OCTANOL |
| 2B4MFU | 2-(T-BUTYL)-4-METHYLFURAN |
| 2CBMN | 2-CHLOROBENZYLIDINEMALONONITRILE |
| 2CECHO | 2-(2-CYANOETHYL) CYCLOHEXANONE |
| 2CHAE | 2-CYCLOPENTENE-1-HENDECANOIC ACID, ETHYL ESTER |
| 2CHE1L | 2-CYCLOHEXEN-1-OL |
| 2CHE1O | 2-CYCLOHEXEN-1-ONE |
| 2CLBP | 2-CHLOROBIPHENYL |
| 2CLEVE | 2-CHLOROETHYLVINYL ETHER / (2-CHLOROETHOXY) ETHENE |
| 2CLP | 2-CHLOROPHENOL |
| 2CLPD4 | 2-CHLOROPHENOL-D4 |
| 2CLT | 2-CHLOROTOLUENE |
| 2CMCHO | 2-(CYANOMETHYL) CYCLOHEXANONE |
| 2CNAP | 2-CHLORONAPHTHALENE |
| 2C4E | 2-BUTENE |
| 2C6MPZ | 2-CHLORO-6-METHOXY-10H-PHENOTHIAZINE |
| 2C7O | 2-HEPTANONE / METHYLPENTYL KETONE |
| 2DMPEN | 2,2-DIMETHYLPENTANE |
| 2ECYBL | 2-ETHYLCYCLOBUTANOL |
| 2EC6A | 2-ETHYLHEXANOIC ACID |
| 2EP | 2-ETHYLPHENOL |
| 2E1HXL | 2-ETHYL-1-HEXANOL |
| 2E2HPD | 2-ETHYL-2-HYDROXYMETHYL-1,3-PROPANEDIOL |
| 2E4MPL | 2-ETHYL-4-METHYL-1-PENTANOL |
| 2FBP | 2-FLUOROBIPHENYL |
| 2FNAP | 2-FLUORONAPHTHALENE |
| 2FP | 2-FLUOROPHENOL |
| 2HBDDM | 2-HYDROXYBUTANEDIOIC ACID, DIMETHYL ESTER |
| 2HBNZL | 2-HYDROXYBENZALDEHYDE / SALICYLALDEHYDE |
| 2HNDOL | 2-HENDECANOL / 2-UNDECANOL |
| 2HYBP | 2-HYDROXYBIPHENYL |
| 2MBZA | 2-METHYLBENZYL ALCOHOL |
| 2MCPNE | 2-METHYLCYCLOPENTANONE |
| 2MCYPL | 2-METHYLCYCLOPENTANOL |
| 2MC3 | 2-METHYLPROPANE / ISOBUTANE |
| 2MC4 | 2-METHYLBUTANE / ISOPENTANE |
| 2MC6 | 2-METHYLHEXANE / ISOHEPTANE |
| 2MC7 | 2-METHYLHEPTANE / ISOOCTANE |
| 2MDEC | 2-METHYLDECANE |

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| 2MDOD | 2-METHYLDODECANE |
| 2MENAP | 2-(1-METHYLETHYL) NAPHTHALENE |
| 2MEPEN | 2-METHYLPENTANE |
| 2MMECO | 2-METHYL-5-(1-METHYLETHYL)-2-CYCLOHEXEN-1-ONE |
| 2MNAP | 2-METHYLNAPHTHALENE |
| 2MP | 2-METHYLPHENOL / 2-CRESOL |
| 2MPAHT | 2-METHYLPROPANOIC ACID, 3-HYDROXY-2,4,4-TRIMETHYLPENTYL ESTER |
| 2MPAME | 2-METHYLPROPANOIC ACID, METHYL ESTER |
| 2MPAIE | 2-METHYLPROPANOIC ACID, 1-(1,1-DIMETHYLETHYL)-2-METHYL- 1,3-PROPANEDIYL ESTER |
| 2MPEAE | 2-METHYL-2-PROPENOIC ACID, 1,2-ETHANEDIYL ESTER |
| 2MPYR | 2-METHYLPYRENE |
| 2MTETD | 2-METHYLTETRADECANE |
| 2MTHF | 2-METHYLTETRAHYDROFURAN |
| 2MTHPM | 2-METHYLTHIO-4-HYDROXYPYRIMIDINE |
| 2MXEXL | 2-(2-METHOXYETHOXY) ETHANOL / DIETHYLENEGYLCOL MONOMETHYLEETHER |
| 2MXMC3 | 2-METHOXY-2-METHYLPROPANE / TERT-BUTYLMETHYL ETHER |
| 2MXTMB | 2-METHOXY-2,3,3-TRIMETHYLBUTANE |
| 2MX1PE | 2-METHOXY-1-PROPENE |
| 2M1DDL | 2-METHYL-1-DODECANOL |
| 2M1PNE | 2-METHYL-1-PENTENE |
| 2M2BDA | 2-METHYL-2-BUTENEDIAMIDE |
| 2M2C3L | 2-METHYL-2-PROPANOL / TERT-BUTANOL |
| 2M2H3B | 2-METHYL-2-HYDROXY-3-BUTYNE |
| 2M24P | 2-METHYL-2,4-PENTANEDIOL |
| 2M3HXE | 2-METHYL-3-HEXENE |
| 2M3PNO | 2-METHYL-3-PENTANONE |
| 2NANIL | 2-NITROANILINE |
| 2NBZLZ | 2-NITROBENZALAZINE |
| 2NKCL | 2.0 N POTASSIUM CHLORIDE |
| 2NNDPA | 2-NITRO-N-NITROSODIPHENYLAMINE |
| 2NODCO | 2-NONADECANONE |
| 2NP | 2-NITROPHENOL |
| 2NT | 2-NITROTOLUENE |
| 2N3C | 2-NITRO-3-CRESOL / 3-METHYL-2-NITROPHENOL |
| 2PETOH | 2-PHENYLETHANOL |
| 2PHXEL | 2-PHENOXYETHANOL |
| 2PNAP | 2-PHENYLNAPHTHALENE |
| 2PROL | 2-PROPANOL |
| 2PXEXL | 2-(2-PHENOXYETHOXY) ETHANOL |
| 2TCLEA | 1,1,1,2-TETRACHLOROETHANE |
| 2TMHPD | 2,6,10,14-TETRAMETHYLHEPTADECANE |
| 2TMPD | 2,6,10,14-TETRAMETHYLPENTADECANE |
| 210DMU | 2,10-DIMETHYLUDECANE |
| 22DMC4 | 2,2-DIMETHYLBUTANE |
| 225TCB | 2,2',5-TRICHLOROBIPHENYL |
| 2255CB | 2,2',5,5'-TETRACHLOROBIPHENYL |
| 226TMO | 2,2,6-TRIMETHYLOCTANE |
| 23C1PE | 2,3-DICHLORO-1-PROPENE |
| 23DCLP | 2,3-DICHLOROPHENOL |
| 23DMC4 | 2,3-DIMETHYLBUTANE |
| 23DMC5 | 2,3-DIMETHYLPENTANE |
| 23DMP | 2,3-DIMETHYLPHENOL |
| 23DNAP | 2,3-DIMETHYLNAPHTHALENE |
| 23D2HL | 2,3-DIMETHYL-2-HEXANOL |
| 23TMP | 2,2,3,3-TETRAMETHYLPENTANE |
| 2345CB | 2,3,4,5-TETRACHLOROBIPHENYL |
| 2346CP | 2,3,4,6-TETRACHLOROPHENOL |

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| 235TMD | 2,3,5-TRIMETHYLDECANE |
| 2356CP | 2,3,5,6-TETRACHLOROPHENOL |
| 236TMN | 2,3,6-TRIMETHYLNAPHTHALENE |
| 237TMO | 2,3,7-TRIMETHYLOCTANE |
| 24D | 2,4-DICHLOROPHENOXYACETIC ACID |
| 24DCB | 2,4'-DICHLOROBIPHENYL |
| 24DCLP | 2,4-DICHLOROPHENOL |
| 24DMC5 | 2,4-DIMETHYLPENTANE |
| 24DMD | 2,4-DIMETHYLDECANE |
| 24DMHX | 2,4-DIMETHYLHEXANE |
| 24DMPN | 2,4-DIMETHYLPHENOL |
| 24DNP | 2,4-DINITROPHENOL |
| 24DNT | 2,4-DINITROTOLUENE |
| 24M2PL | 2,4-DIMETHYL-2-PENTANOL |
| 24NPD3 | 2,4-DINITROPHENOL-D3 |
| 24T13P | 2,2,4-TRIMETHYL-1,3-PENTANEDIOL |
| 245PCB | 2,2',4,5,5'-PENTACHLOROBIPHENYL |
| 245T | 2,4,5-TRICHLOROPHENOXYACETIC ACID |
| 245TCP | 2,4,5-TRICHLOROPHENOL |
| 246MPY | 2,4,6-TRIMETHYLPYRIDINE |
| 246TBP | 2,4,6-TRIBROMOPHENOL |
| 246TCA | 2,4,6-TRICHLOROANILINE |
| 246TCP | 2,4,6-TRICHLOROPHENOL |
| 246TMO | 2,4,6-TRIMETHYLOCTANE |
| 246TNP | 2,4,6-TRINITROPHENOL / PICRIC ACID |
| 246TNR | 2,4,6-TRINITROKESORCINOL / STYPHNIC ACID |
| 246TNT | 2,4,6-TRINITROTOLUENE |
| 247HOI | 2,2,4,4,7,7-HEXAMETHYLOCTAHYDRO-1H-INDENE |
| 247TMO | 2,4,7-TRIMETHYLOCTANE |
| 25C14D | 2,5-CYCLOHEXADIEN-1,4-DIONE |
| 25DCLP | 2,5-DICHLOROPHENOL |
| 25DMP | 2,5-DIMETHYLPHENOL |
| 25DMPA | 2,5-DIMETHYLPHENANTHRENE |
| 25DTHF | 2,5-DIMETHYLTETRAHYDROFURAN |
| 25HPCB | 2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL |
| 25HXCB | 2,2',3,4,5,5'-HEXACHLOROBIPHENYL |
| 25OCCB | 2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL |
| 256TMD | 2,5,6-TRIMETHYLDECANE |
| 26DBMP | 2,6-DI-T-BUTYL-4-METHYLPHENOL |
| 26DCLP | 2,6-DICHLOROPHENOL |
| 26DMO | 2,6-DIMETHYLOCTANE |
| 26DMP | 2,6-DIMETHYLPHENOL |
| 26DMST | 2,6-DIMETHYLSTYRENE |
| 26DMUD | 2,6-DIMETHYLUNDECANE |
| 26DNA | 2,6-DINITROANILINE |
| 26DNT | 2,6-DINITROTOLUENE |
| 26HPCB | 2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL |
| 2611MD | 2,6,11-TRIMETHYLDODECANE |
| 27DMO | 2,7-DIMETHYLOCTANE |
| 27DNAP | 2,7-DIMETHYLNAPHTHALENE |
| 29DMUD | 2,9-DIMETHYLUNDECANE |
| 3BPETH | 3-BUTENYLPENTYL ETHER |
| 3CHXD | 3-CYCLOHEXYLDECANE |
| 3CLP | 3-CHLOROPHENOL |
| 3CLT | 3-CHLOROTOLUENE |
| 3CMCH | 3-(CHLOROMETHYL) CYCLOHEXENE |
| 3C1C3E | 3-CHLORO-1-PROPENE / ALLYL CHLORIDE |
| 3DCHEO | 3,5-DIMETHYL-2-CYCLOHEXEN-1-ONE |
| 3EEBOD | 3-ETHYL-5-(2-ETHYLBUTYL) OCTADECANE |
| 3EE2BO | 3,4-EPOXY-3-ETHYL-2-BUTANONE |

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| 3EHXDE | 3-ETHYL-1,4-HEXADIENE |
| 3EP | 3-ETHYLPHENOL |
| 3E22MP | 3-ETHYL-2,2-DIMETHYLPENTANE / 3-(T-BUTYL)-PENTANE |
| 3E25DH | 3-ETHYL-2,5-DIMETHYL-3-HEXENE |
| 3HDMPL | 3-(HYDROXYMETHYL)-4,4-DIMETHYLPENTANAL |
| 3HDMPT | 3-HYDROXY-2,7-DIMETHYL-4-{3H}-PTERIDINONE |
| 3HXE2O | 3-HEXEN-2-ONE |
| 3MBP | 3-METHYLBIPHENYL |
| 3MCHRY | 3-METHYLCHRYSENE |
| 3MC6 | 3-METHYLHEXANE |
| 3MEPEN | 3-METHYLPENTANE |
| 3MP | 3-METHYLPHENOL / 3-CRESOL |
| 3MPANR | 3-METHYLPHENANTHRENE |
| 3MUND | 3-METHYLUNDECANE |
| 3MXIMZ | 3-METHOXYIMIDAZOLE |
| 3MXT | 3-METHOXYTOLUENE |
| 3M1PL | 3-METHYL-1-PENTANOL |
| 3M2CHO | 3-METHYL-2-CYCLOHEXEN-1-ONE |
| 3M2C1O | 3-METHOXY-2-CYCLOPENTEN-1-ONE |
| 3M2C5E | 3-METHYL-2-PENTENE |
| 3M2HXL | 3-METHYL-2-HEXANOL |
| 3M5PNN | 3-METHYL-5-PROPYLNONANE |
| 3NANIL | 3-NITROANILINE |
| 3NT | 3-NITROTOLUENE |
| 3OCTOL | 3-OCTANOL |
| 3OPPAE | 3-OXO-3-PHENYLPROPANOIC ACID, ETHYL ESTER |
| 3PC3AC | 3-PHENYLPROPANOYL CHLORIDE / HYDROCINNAMYL CHLORIDE |
| 3PT | 3-PROPYLTOLUENE |
| 3S5E3L | (3BETA)-STIGMAST-5-EN-3-OL |
| 3TBUP | 3-(T-BUTYL) PHENOL |
| 3TCHEO | 3,5,5-TRIMETHYL-2-CYCLOHEXEN-1-ONE |
| 33DCBD | 3,3'-DICHLORO BENZIDINE |
| 33DMHX | 3,3-DIMETHYLHEXANE |
| 33DMPN | 3,3-DIMETHYLPENTANE |
| 34CBD6 | 3,3',4,4'-TETRACHLOROBIPHENYL-D6 |
| 34DCLP | 3,4-DICHLOROPHENOL |
| 34DMP | 3,4-DIMETHYLPHENOL |
| 34D1DE | 3,4-DIMETHYL-1-DECENE |
| 344TPE | 3,4,4-TRIMETHYL-2-PENTENE |
| 345T1H | 3,4,5-TRIMETHYL-1-HEXENE |
| 35DMP | 3,5-DIMETHYLPHENOL |
| 35DNA | 3,5-DINITROANILINE |
| 35DNP | 3,5-DINITROPHENOL |
| 35DNT | 3,5-DINITROTOLUENE |
| 35M3HL | 3,5-DIMETHYL-3-HEXANOL |
| 36DF9O | 3,6-DICHLOROFLUOREN-9-ONE |
| 36TMPA | 3,4,5,6-TETRAMETHYLPHENANTHRENE |
| 37DMNN | 3,7-DIMETHYLNONANE |
| 38DMUD | 3,8-DIMETHYLUNDECANE |
| 4AMORP | 4-ACETYLMORPHOLINE |
| 4A35DT | 4-AMINO-3,5-DINITROTOLUENE |
| 4BFB | 4-BROMOFLUOROBENZENE |
| 4BRPPE | 4-BROMOPHENYLPHENYL ETHER |
| 4B3P2O | 4-BUTOXY-3-PENTEN-2-ONE |
| 4CANIL | 4-CHLOROANILINE |
| 4CCHXL | 4-CHLOROCYCLOHEXANOL |
| 4CLPPE | 4-CHLOROPHENYLPHENYL ETHER |
| 4CLT | 4-CHLOROTOLUENE |
| 4CL2C | 4-CHLORO-2-CRESOL / 2-METHYL-4-CHLOROPHENOL |
| 4CL3C | 4-CHLORO-3-CRESOL / 3-METHYL-4-CHLOROPHENOL |

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| 4C3MBE | 4-CHLORO-3-METHYL-1-BUTENE |
| 4DM2PL | 4,4-DIMETHYL-2-PENTANOL |
| 4ETMHP | 4-ETHYL-2,2,6,6-TETRAMETHYLHEPTANE |
| 4E2OCE | 4-ETHYL-2-OCTENE |
| 4FANIL | 4-FLUOROANILINE |
| 4FT | 4-FLUOROTOLUENE |
| 4HAZOB | 4-HYDROXYAZOBENZENE |
| 4HYBA | 4-HYDROXYBENZALDEHYDE |
| 4H3MBA | 4-HYDROXY-3-METHOXYBENZALDEHYDE / VANILLIN |
| 4H35BA | 4-HYDROXY-3,5-DIMETHOXYBENZALDEHYDE |
| 4IOMQU | 4-IODOMETHYLQUINULCIDINE |
| 4MBP | 4-METHYLBIPHENYL |
| 4MBSA | 4-METHYLBENZENE SULFONAMIDE |
| 4MC7 | 4-METHYLHEPTANE |
| 4MDBFU | 4-METHYLDIBENZOFURAN |
| 4MENPA | 4-(1-METHYLETHYL)-N-PHENYLANILINE |
| 4MFLRE | 4-METHYL-9H-FLUORENE |
| 4MMBHE | 4-METHYL-1-(1-METHYLETHYL)-BICYCLO {3.1.0} HEX-2-ENE |
| 4MP | 4-METHYLPHENOL / 4-CRESOL |
| 4MPANR | 4-METHYLPHENANTHRENE |
| 4MPYR | 4-METHYLPYRENE |
| 4MXCHL | 4-METHOXYCYCLOHEXANOL |
| 4MXP | 4-METHOXYPHENOL |
| 4M2PPL | 4-METHYL-2-PROPYL-1-PENTANOL |
| 4NANIL | 4-NITROANILINE |
| 4NP | 4-NITROPHENOL |
| 4TBU2C | 4-T-BUTYL-2-CRESOL / METHYL-4-(T-BUTYL) PHENOL |
| 4TOP | 4-T-OCTYLPHENOL |
| 41MEHP | 4-(1-METHYLETHYL) HEPTANE |
| 44DCBZ | 4,4'-DICHLOOROBENZOPHENONE |
| 44DFBZ | 4,4'-DIFLUOROBENZOPHENONE |
| 44DMPE | 4,4-DIMETHYL-2-PENTENE |
| 44DMUD | 4,4-DIMETHYLUDECANE |
| 46DN2C | 4,6-DINITRO-2-CRESOL / METHYL-4,6-DINITROPHENOL |
| 468T1N | 4,6,8-TRIMETHYL-1-NONENE |
| 47DMUD | 4,7-DIMETHYLUDECANE |
| 48DMHD | 4,8-DIMETHYLHENEDECANE |
| 5CL2C | 5-CHLORO-2-CRESOL / 2-METHYL-5-CHLOROPHENOL |
| 5E2MHP | 5-ETHYL-2-METHYLHEPTANE |
| 5E5MD | 5-ETHYL-5-METHYLDECANE |
| 5M2HXO | 5-METHYL-2-HEXANONE |
| 5M5HAL | 5-METHYL-5-HYDROXYHEXANOIC ACID LACTONE |
| 5N2OL | 5-NORBOREN-2-OL |
| 5PTRID | 5-PROPYLTRIDEDECANE |
| 50H50A | 50% HEXANE - 50% ACETONE |
| 50M50A | 50% METHYLENE CHLORIDE - 50% ACETONE |
| 50WMAN | 50% WATER - 25% METHANOL - 25% ACETONITRILE |
| 6CL3C | 6-CHLORO-3-CRESOL / 3-METHYL-6-CHLOROPHENOL |
| 6E6MFV | 6-ETHYL-6-METHYLFULVENE |
| 6MEPUR | 6-METHYLPURINE |
| 6MTRID | 6-METHYLTRIDEDECANE |
| 6M3HPL | 6-METHYL-3-HEPTANOL |
| 6TBU2C | 6-T-BUTYL-2-CRESOL / 2-METHYL-6-(T-BUTYL) PHENOL |
| 7MTRID | 7-METHYLTRIDEDECANE |
| 8MNNDL | 8-METHYL-1,8-NONANEDIOL |
| 9FLENO | 9-FLUORENONE |
| 9MBAAN | 9-METHYLBENZ [A] ANTHRACENE |
| 9MXANT | 9-METHOXYANTHRACENE |

* DENOTES GENERIC TEST NAME

(ALPHABETIC SORT BY TEST-NAMES)

| | |
|--------|---|
| ANAPNE | ACENAPHTHENE |
| ACND10 | ACENAPHTHENE-D10 |
| ANAPYL | ACENAPHTHYLENE |
| AACHXE | ACETIC ACID, CYCLOHEXYL ESTER |
| C2AEE | ACETIC ACID, ETHYL ESTER / ETHYL ACETATE |
| C2AVE | ACETIC ACID, VINYL ESTER / VINYL ACETATE |
| ACET | ACETONE |
| CH3CN | ACETONITRILE |
| ACPHN | ACETOPHENONE |
| ACIDIT | *ACIDITY |
| ACDHMW | *ACIDS (HIGH MOLECULAR WEIGHT) |
| ACROLN | ACROLEIN |
| ACRYLO | ACRYLONITRILE |
| DM | ADAMSITE |
| ALHMW | *ALCOHOLS (HIGH MOLECULAR WEIGHT) |
| ALDEHY | *ALDEHYDES |
| ALDRN | ALDRIN |
| ALAL | *ALIPHATIC ALCOHOLS |
| ALHC | *ALIPHATIC HYDROCARBONS |
| ALK | *ALKALINITY |
| ALKBIC | *ALKALINITY, BICARBONATE |
| ALKCAR | *ALKALINITY, CARBONATE |
| ALKHYD | *ALKALINITY, HYDROXIDE |
| ALKN | *ALKANES |
| AYLETH | ALLYL ETHER |
| ABHC | ALPHA-BENZENEHEXACHLORIDE / ALPHA-HEXACHLOROCYCLOHEXANE |
| AENSLF | ALPHA-ENDOSULFAN / ENDOSULFAN I |
| MBZA | ALPHA-METHYLBENZYL ACETOACETATE |
| MBOH | ALPHA-METHYLBENZYL ALCOHOL |
| MBZCL | ALPHA-METHYLBENZYL-2-CHLOROACETOACETATE |
| BZAL2M | ALPHA,ALPHA-DIMETHYLBENZENEMETHANOL |
| AL | ALUMINUM |
| NH3 | AMMONIA |
| NH3N2 | AMMONIA NITROGEN |
| ADHP | AMMONIUM DIHYDROGEN PHOSPHATE |
| ANIL | ANILINE |
| ANELNT | *ANION ELUENT |
| ANTRC | ANTHRACENE |
| ACHE | ANTICHOLINESTERASE |
| SB | ANTIMONY |
| AS | ARSENIC |
| ASEXT | *ARSENIC, EXTRACTABLE |
| ASTOT | *ARSENIC, TOTAL |
| ASBEST | ASBESTOS |
| ANTRQU | ATHRAQUINONE / 9,10-ANTHRACENEDIONE |
| ATZ | ATRAZINE |
| AZACN | AZACYLONONANE |
| BA | BARIUM |
| BENZAL | BENZALDEHYDE |
| BENZA | BENZANTHRONE |
| C6H6 | BENZENE |
| BZPA | BENZENEPHOSPHONIC ACID |
| C6D6 | BENZENE-D6 |
| BZFANT | BENZFLUORANTHENE |
| BENZID | BENZIDINE |
| BAANTR | BENZO (A) ANTHRACENE |
| BZAPAN | BENZO (A) PHENANTHRENE |

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| BAPYR | BENZO [A] PYRENE |
| BBFANT | BENZO [B] FLUORANTHENE |
| BBFLRE | BENZO [B] FLUORENE |
| BBNTHP | BENZO [B] NAPHTHO [1,2-D] THIOPHENE |
| BZOTHP | BENZO [B] THIOPHENE |
| BZCPAN | BENZO [C] PHENANTHRENE |
| BGHIFA | BENZO [G,H,I] FLUROANTHENE |
| BGHIPY | BENZO [G,H,I] PERYLENE |
| BZHQUN | BENZO [H] QUINOLINE |
| BJFANT | BENZO [J] FLUORANTHENE |
| BKFANT | BENZO [K] FLUORANTHENE |
| BF2ANT | BENZOBIFLUOROANTHENE |
| BENZOA | BENZOIC ACID |
| BZOAME | BENZOIC ACID, METHYL ESTER / METHYL BENZOATE |
| BTZ | BENZOTHIAZOLE |
| BZALC | BENZYL ALCOHOL |
| BZYLBR | BENZYL BROMIDE / ALPHA-BROMOTOLUENE |
| BE | BERYLLIUM |
| BBHC | BETA-BENZENEHEXACHLORIDE / BETA-HEXACHLOROCYCLOHEXANE |
| BENSLF | BETA-ENDOSULFAN / ENDOSULFAN II |
| HCO3 | BICARBONATE |
| BCHPD | BICYCLO [2,2,1] HEPTA-2,5-DIENE |
| BCY3HX | BICYCLO [3,1,0] HEXANE |
| BICYHX | BICYCLOHEXYL |
| BINAP | BINAPHTHYL |
| BOD | *BIOLOGICAL OXYGEN DEMAND |
| BCMSO2 | BIS (CARBOXYMETHYL) SULFONE |
| BCMSO | BIS (CARBOXYMETHYL) SULFOXIDE |
| BCLME | BIS (CHLOROMETHYL) ETHER |
| DIAET | BIS (DIISOPROPYLAMINO) ETHANETHIOL |
| DIAEL | BIS (DIISOPROPYLAMINO) ETHANOL |
| DIADS | BIS (DIISOPROPYLAMINO) ETHYLDISULFIDE |
| DIAS | BIS (DIISOPROPYLAMINO) ETHYLSULFIDE |
| DIASO2 | BIS (DIISOPROPYLAMINO) ETHYLSULFONATE |
| C185FP | BIS (PENTAFLUOROPHENYL) PHENYL PHOSPHINE |
| BTMSOA | BIS (TRIMETHYLSILYL) OXALIC ACID |
| B2CEXM | BIS (2-CHLOROETHOXY) METHANE |
| B2CLEE | BIS (2-CHLOROETHYL) ETHER |
| B2CIPE | BIS (2-CHLOROISOPROPYL) ETHER |
| B2EHP | BIS (2-ETHYLHEXYL) PHTHALATE |
| BLDX | BLADEX |
| B | BORON |
| BRMCIL | BROMACIL |
| BRC6H5 | BROMOBENZENE |
| BRCLM | BROMOCHLOROMETHANE |
| BRDCLM | BROMODICHLOROMETHANE |
| CHBR3 | BROMOFORM |
| CH3BR | BROMOMETHANE |
| C4 | BUTANE |
| BDADME | BUTANEDIOIC ACID, DIMETHYL ESTER |
| BAHXE | BUTANOIC ACID, 1-HEXYL ESTER |
| BUC6H5 | BUTYLBENZENE |
| BBZP | BUTYLBENZYL PHTHALATE |
| BUEETH | BUTYLETHYL ETHER |
| BMP | BUTYLMETHYL PHTHALATE |
| BFBG | BUTYLPHTHALYL BUTYLGLYCOLATE |
| CD | CADMIUM |
| CA | CALCIUM |
| CACO3S | *CALCIUM CARBONATE SOLUTION |
| CAMP | CAMPHOR |

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|--------|---|
| CAPLCT | CAPROLACTAM / 6-AMINOHEXANOIC ACID LACTAM |
| CAME | CARBAMIC ACID, METHYL ESTER |
| CS2 | CARBON DISULFIDE |
| CMONOX | CARBON MONOXIDE |
| CCL4 | CARBON TETRACHLORIDE |
| CO3 | CARBONATE |
| ClADME | CARBONIC ACID, DIMETHYL ESTER |
| CEC | *CATION EXCHANGE CAPACITY |
| CS | CESIUM |
| COD | *CHEMICAL OXYGEN DEMAND |
| CLO3 | CHLORATE |
| CLDAN | CHLORDANE |
| CLDEN | CHLORDENE |
| CL | CHLORIDE |
| CLXB | *CHLORINATED BENZENES |
| CLXNAP | *CHLORINATED NAPHTHALENES |
| CL2 | CHLORINE |
| CLD | *CHLORINE DEMAND |
| CLNAP | *CHLORO NAPHTHALENES |
| CLP | *CHLORO PHENOLS |
| CLC2A | CHLOROACETIC ACID |
| CN | CHLOROACETOPHENONE |
| CLC6H5 | CHLOROBENZENE |
| CLC6D5 | CHLOROBENZENE-D5 |
| CLCYHX | CHLOROCYCLOHEXANE |
| CCLF2 | CHLORODIFLUOROMETHANE |
| CDNBIS | *CHLORODINITROBENZENE ISOMER |
| C2H5CL | CHLOROETHANE |
| C2H3CL | CHLOROETHENE / VINYL CHLORIDE |
| CHCL3 | CHLOROFORM |
| CDCL3 | CHLOROFORM-D |
| CH3CL | CHLOROMETHANE |
| CHOLA | CHOLESTANE |
| CRO4 | CHROMATE |
| CR | CHROMIUM |
| CHRY | CHRYSENE |
| CYSD12 | CHRYSENE-D12 |
| CBCCH | CIS-1-BROMO-2-CHLOROCYCLOHEXANE |
| CDACH | CIS-1,2-DIACETOXYCYCLOHEXANE |
| C12DCE | CIS-1,2-DICHLOROETHENE |
| C13DCP | CIS-1,3-DICHLOROPROPYLENE / CIS-1,3-DICHLOROPROPENE |
| C4HX1L | CIS-4-HEXEN-1-OL |
| CO | COBALT |
| CU | COPPER |
| CUEXT | *COPPER, EXTRACTABLE |
| CUTOT | *COPPER, TOTAL |
| COUMRN | COUMARAN / 2,3-DIHYDROBENZOFURAN |
| CSOL | *CRESOLS |
| CYN | CYANIDE |
| CYNF | *CYANIDE, FREE FORM |
| CK | CYANOGEN CHLORIDE |
| CYDODC | CYCLODODECANE |
| CYHX | CYCLOHEXANE |
| C6HOH | CYCLOHEXANOL |
| CHONE | CYCLOHEXANONE |
| CYHXB | CYCLOHEXYLBENZENE / PHENLYCYCLOHEXANE |
| CYOCTE | CYCLOOCTATETRAENE |
| CYPD | CYCLOPENTADIENE |
| CPCXAL | CYCLOPENTANECARBOXALDEHYDE |
| CPO | CYCLOPENTANONE |

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|--------|---|
| CYPNE | CYCLOPENTENE |
| HMX | CYCLOTETRAMETHYLENETETRANITRAMINE |
| RDX | CYCLOTRIMETHYLENETRINITRAMINE / CYCLONITE |
| C18UNS | *C18H300 UNKNOWN |
| C22UNS | *C22H400 UNKNOWN |
| F10BP | DECAFLUOROBIPHENYL |
| DCMPX | DECAMETHYLCYCLOPENTASILOXANE |
| C10 | DECANE |
| DECYLB | DECYLBENZENE |
| DIH2O | DEIONIZED WATER |
| DBHC | DELTA-BENZENEHEXACHLORIDE / DELTA-HEXACHLOROCYCLOHEXANE |
| DIACAL | DIACETONE ALCOHOL / 4-HYDROXY-4-METHYL-2-PENTANONE |
| DIAZ | DIAZINON |
| DBABA | DIBENZ [A,B] ANTHRACENE |
| DBAHA | DIBENZ [A,H] ANTHRACENE |
| DBZFUR | DIBENZOFURAN |
| DBZTHP | DIBENZOTHIOPHENE |
| DBRCLM | DIBROMOCHLOROMETHANE |
| DBCP | DIBROMOCHLOROPROPANE |
| DBUCLE | DIBUTYLCHLORENDATE |
| CL2BZ | *DICHLORO BENZENES |
| CL2BP | *DICHLORO BIPHENYLS |
| CL2NAP | *DICHLORO NAPHTHALENES |
| DICLP | *DICHLORO PHENOLS |
| CL2ACN | DICHLOROACETONITRILE |
| DCBPH | DICHLOROBENZOPHENONE |
| CCL2F2 | DICHLORODIFLUOROMETHANE |
| ED | DICHLOROETHYL ARSINE |
| PD | DICHLOROPHENYL ARSINE |
| DCHP | DICYCLOHEXYL PHTHALATE |
| DCPD | DICYCLOPENTADIENE |
| DLDRN | DIELDIN |
| DEDMP | DIETHYL DIMETHYL DIPHOSPHONATE |
| DEETH | DIETHYL ETHER |
| DEP | DIETHYL PHTHALATE |
| DEPD4 | DIETHYL PHTHALATE-D4 |
| DEA | DIETHYLAMINE |
| DEGLYC | DIETHYLENE GLYCOL / 2,2-OXY BIS (ETHANOL) |
| DIBP | DIISOBUTYL PHTHALATE |
| DIOP | DIISOOCTYL PHTHALATE |
| DIDDP | DIISOPROPYL DIMETHYL DIPHOSPHONATE |
| DIPETH | DIISOPROPYL ETHER |
| DIPUR | DIISOPROPYL UREA |
| DIMP | DIISOPROPYLMETHYL PHOSPHONATE |
| DMXDMS | DIMETHOXY DIMETHYLSILANE |
| ME2AEA | DIMETHYL ARSENIC ACID |
| DMDS | DIMETHYL DISULFIDE |
| DMCAR | DIMETHYL DITHIOCARBONATE |
| DMETH | DIMETHYL ETHER |
| DMIP | DIMETHYL ISOPHTHALATE |
| ME2HG | DIMETHYL MERCURY |
| ME2NAP | *DIMETHYL NAPHTHALENES |
| DMP | DIMETHYL PHTHALATE |
| ME2C11 | *DIMETHYL UNDECANES |
| DMMP | DIMETHYLMETHYL PHOSPHATE |
| DNTISO | *DINITROTOLUENE ISOMER |
| DOAD | DIOCTYL ADIPATE |
| DOAZ | DIOCTYL AZELATE |
| DOETH | DIOCTYL ETHER |
| DPHNY | DIPHENYL |

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| DPETH | DIPHENYL ETHER |
| DPSULF | DIPHENYL SULFIDE / 1,1-THIO BIS (BENZENE) |
| DPSO | DIPHENYL SULFOXIDE |
| DPA | DIPHENYLAMINE |
| DSEDIN | DISELENO DIINDOLE |
| DO | *DISSOLVED OXYGEN |
| HD | DISTILLED MUSTARD / BIS (2-CHLOROETHYL) SULFIDE |
| DITH | DITHIANE |
| DNBP | DI-N-BUTYL PHTHALATE |
| DNOP | DI-N-OCTYL PHTHALATE |
| DNOPD4 | DI-N-OCTYL PHTHALATE-D4 |
| DNPP | DI-N-PENTYL PHTHALATE |
| DL2HPG | DL-2-(3-HYDROXYPHENYL) GLYCINE |
| C12 | DODECANE |
| DODECB | DODECYLBENZENE |
| DOPAM | DOPAMINE / 4-(2-AMINOETHYL) PYROCATECHOL |
| DURS | DURSBAN |
| DPNTLL | D-(-)-PANTOLYL LACTONE |
| C20 | EICOSANE |
| ESFSO4 | ENDOSULFAN SULFATE |
| ENDRN | ENDRIN |
| ENDRNA | ENDRIN ALDEHYDE |
| ENDRNK | ENDRIN KETONE |
| ETOH | ETHANOL |
| ETC6H5 | ETHYLBENZENE |
| ETBD10 | ETHYLBENZENE-D10 |
| ETCYHX | ETHYLCYCLOHEXANE |
| EMPA | ETHYLMETHYL PHOSPHONIC ACID / ETHYLMETHYL PHOSPHONATE |
| ENHETH | ETHYL-N-HEXYL ETHER |
| EBCPGL | ETHYL-2,2-BIS (4-CHLOROPHENYL) GLYCOLATE |
| XPLOSV | *EXPLOSIVE SPRAY |
| FARN | FARNESOL |
| FATAL | *FATTY ALCOHOLS |
| FANT | FLUORANTHENE |
| FLRENE | FLUORENE |
| F | FLUORIDE |
| FC2A | FLUOROACETIC ACID |
| MBAS | *FOAMING AGENTS / METHYALYNE BLUE ACTIVE SUBSTANCE |
| FABPEE | FORMIC ACID, BETA-PHENYLETHYL ESTER |
| FACHXE | FORMIC ACID, CYCLOHEXYL ESTER |
| FREON | FREON / DICHLOROFLUOROMETHANE |
| DYSCAN | *GC-MS DYE SCAN |
| MSSCAN | *GC-MS ORGANIC SCAN |
| GRNDY | GREEN DYE |
| HWX013 | HALOWAX 1013 |
| HWX099 | HALOWAX 1099 |
| C11 | HENDECANE |
| C21 | HENEICOSANE |
| HPCL | HEPTACHLOR |
| HPCLE | HEPTACHLOR EPOXIDE |
| CL7BP | *HEPTACHLORO BIPHENYLS |
| CL7NB | *HEPTACHLORO NORBORNADIENES |
| C7NB1 | HEPTACHLORONORBORNENE |
| C17 | HEPTADECANE |
| C17AM | HEPTADECANOIC ACID, METHYL ESTER |
| C7 | HEPTANE |
| C7A | HEPTANOIC ACID |
| CL6BP | *HEXACHLORO BIPHENYLS |
| CL6BZ | HEXACHLOROBENZENE |
| HCBD | HEXACHLOROBUTADIENE |

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| CL6CP | HEXACHLOROCYCLOPENTADIENE |
| CL6ET | HEXACHLOROETHANE |
| HCNB | HEXACHLORONORBORNADIENE |
| HXCOS | HEXACOSANE |
| C16 | HEXADECANE |
| C16A | HEXADECANOIC ACID / PALMITIC ACID |
| C16AEH | HEXADECANOIC ACID, BIS (2-ETHYLHEXYL) ESTER |
| C16ABE | HEXADECANOIC ACID, BUTYL ESTER |
| C16ADM | HEXADECANOIC ACID, DIMETHYL ESTER |
| C16AME | HEXADECANOIC ACID, METHYL ESTER |
| HXMTSX | HEXAMETHYLCYCLOTRISILOXANE |
| HXMETA | HEXAMETHYLENETETRAMINE / 1,3,5,7-TETRAAZATRICYCLO [3.3.13.7] DECANE |
| HEXANE | HEXANE |
| HXAB2E | HEXANEDIOIC ACID, BIS (2-ETHYLHEXYL) ESTER |
| HXADBE | HEXANEDIOIC ACID, DIBUTYL ESTER / DIBUTYL ADIPATE |
| HXADME | HEXANEDIOIC ACID, DIMETHYL ESTER / DIMETHYL ADIPATE |
| HXADOE | HEXANEDIOIC ACID, DIOCTYL ESTER / DIOCTYL ADIPATE |
| C36 | HEXATRIACONTANE |
| CRHEX | HEXAVALENT CHROMIUM |
| HPLH2O | HPLC GRADE WATER |
| HYDRZ | HYDRAZINE |
| HYDRND | HYDRINDANE / OCTAHYDRO-1H-INDENE |
| CALLMW | *HYDROCARBONS (ALL MOLECULAR WEIGHTS) |
| AC | HYDROGEN CYANIDE / HYDROCYANIC ACID |
| H2S | HYDROGEN SULFIDE |
| HPO4 | *HYDROLYZABLE PHOSPHATE |
| INDENE | INDENE |
| ICDPYR | INDENO {1,2,3-C,D} PYRENE |
| INDOLE | INDOLE / 2,3-BENZOPYRROLE |
| FE | IRON |
| ISODR | ISODRIN |
| ISOPHR | ISOPHORONE |
| ISOPBZ | ISOPROPYLBENZENE / CUMENE |
| IMPA | ISOPROPYLMETHYL PHOSPHONIC ACID / ISOPROPYLMETHYL PHOSPHONATE |
| ISOQUN | ISOQUINOLINE |
| KEND | KETO-ENDRIN |
| LACYBB | LACTIC ACID, CYCLIC BUTANEBORONATE |
| LAURIC | LAURIC ACID |
| PB | LEAD |
| PBSTY | LEAD STYPHNATE |
| H | LEVINSTEIN MUSTARD |
| L | LEWISITE |
| LO | LEWISITE OXIDE |
| LIN | LINDANE / GAMA-BENZENEHEXACHLORIDE / GAMMA- HEXACHLOROCYCLOHEXANE |
| MG | MAGNESIUM |
| MLTHN | MALATHION |
| MALO | MALONONITRILE |
| MN | MANGANESE |
| HG | MERCURY |
| HGEXT | *MERCURY, EXTRACTABLE |
| HGTOT | *MERCURY, TOTAL |
| MESTOX | MESITYL OXIDE / 4-METHYL-3-PENTEN-2-ONE |
| MEOH | METHANOL |
| MEXCLR | METHOXYCHLOR |
| MEAOA | METHYL ARSONIC ACID |
| MEHG | METHYL MERCURY |
| MEHGCL | METHYL MERCURY CHLORIDE |

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| METLAP | *METHYL NAPHTHALENES |
| MP | *METHYL PHENOLS |
| MECYBU | METHYLCYCLOBUTANE |
| MECYDC | METHYLCYCLODECANE |
| MECC6 | METHYLCYCLOHEXANE |
| MECYPE | METHYLCYCLOPENTANE |
| CH2BR2 | METHYLENE BROMIDE |
| CH2CL2 | METHYLENE CHLORIDE |
| CD2CL2 | METHYLENE CHLORIDE-D2 |
| MEK | METHYLETHYL KETONE / 2-BUTANONE |
| MHYDRZ | METHYLHYDRAZINE |
| MIBK | METHYLISOBUTYL KETONE |
| MIPK | METHYLISOPROPYL KETONE |
| MPA | METHYLPHOSPHONIC ACID |
| MPK | METHYLPROPYL KETONE / 2-PENTANONE |
| MNBK | METHYL-N-BUTYL KETONE / 2-HEXANONE |
| ME2HPL | *METHYL-2-HEPTANOLS |
| ME2HPO | *METHYL-2-HEPTANONES |
| MTRZL | METRAZOL / CARDIAZOLE |
| MQFH2O | MILLI-Q-FILTERED WATER |
| MIREX | MIREX |
| MO | MOLYBDENUM |
| NAP | NAPHTHALENE |
| NAPD8 | NAPHTHALENE-D8 |
| NI | NICKEL |
| NO3 | NITRATE |
| NO2 | NITRITE |
| NIT | *NITRITE, NITRATE-NON SPECIFIC |
| NITARO | *NITRO AROMATICS |
| NB | NITROBENZENE |
| NBD5 | NITROBENZENE-D5 |
| NC | NITROCELLULOSE |
| NC1 | NITROCELLULOSE, 12% N |
| NC2 | NITROCELLULOSE, 13.4% N |
| N2KJEL | *NITROGEN BY KJELDAHL METHOD |
| NDIOX | NITROGEN DIOXIDE |
| HN | NITROGEN MUSTARD |
| NG | NITROGLYCERINE |
| NQ | NITROQUANIDINE |
| NDNPA | NITROSO DI-N-PROPYLAMINE |
| C19 | NONADECANE |
| C19A | NONADECANOIC ACID |
| C9 | NONANE |
| NNADME | NONANEDIOIC ACID, DIMETHYL ESTER |
| NCLN | NORTRICYCLANOL |
| NBUETH | N-BUTYL ETHER / 1,1'-OXY BIS (BUTANE) |
| NBMBSA | N-BUTYL-4-METHYLBENZENESULFONAMIDE |
| NECHXA | N-ETHYLCYCLOHEXYLAMINE |
| NE2PEA | N-ETHYL-2-PROPENAMIDE |
| NMANIL | N-METHYLANILINE |
| NMCANE | N-METHYLCARBAMIC ACID, 1-NAPHTHYL ESTER |
| NMNSOA | N-METHYL-N-NITROSOANILINE |
| TETRYL | N-METHYL-N,2,4,6-TETRANITROANILINE / NITRAMINE |
| NDHXA | N-NITRO DIHEXYLAMINE |
| NNDMEA | N-NITROSO DIMETHYLAMINE |
| NNDPA | N-NITROSO DIPHENYLAMINE |
| NNDNPA | N-NITROSO DI-N-PROPYLAMINE |
| NNPIPA | N-NITROSOPENTYLLISOPENTYLAMINE |
| NN4HPL | N-NITROSO-4-HYDROXYPROLINE |
| PENAMD | N-PENTAMIDE |

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| NHEDCA | N-(2-HYDROXYETHYL)-DECANAMIDE |
| NCPPPA | N-(4-CHLOROPHENYL)-3-PHENYL-2-PROPENAMIDE |
| NNDMA | N,N-DIMETHYLANILINE |
| NDMBSA | N,4-DIMETHYLBENZENESULFONAMIDE |
| ODMNSX | OCTADECAMETHYLCYCLONONASILOXANE |
| C18 | OCTADECANE |
| ODECA | OCTADECANOIC ACID / STEARIC ACID |
| C18ABE | OCTADECANOIC ACID, BUTYL ESTER |
| C18AE | OCTADECANOIC ACID, ETHYL ESTER |
| C18AME | OCTADECANOIC ACID, METHYL ESTER |
| C18AOD | OCTADECANOIC ACID, OCTADECYL ESTER |
| ODAPDM | OCTADECANOIC ACID, (2-PHENYL-1,3-DIOXOLAN-4-YL)METHYL ESTER |
| OMCTSX | OCTAMETHYLCYCLOTETRAASILOXANE |
| C8 | OCTANE |
| OCADME | OCTANEDIOIC ACID, DIMETHYL ESTER |
| C8AME | OCTANOIC ACID, METHYL ESTER |
| OILGR | *OIL & GREASE |
| OPO4 | *ORGANOPHOSPHATES |
| PO4ORT | ORTHOPHOSPHATE |
| OXCN | OXACYCLONONANE |
| OZONE | OZONE |
| OEMP | O-ETHYLMETHYL PHOSPHONATE |
| VM | O-ETHYL-S-(2-DIETHYLAMINOETHYL) METHYL PHOSPHONOTHIOLATE |
| VX | O-ETHYL-S-(2-DIISOPROPYLAMINOETHYL) METHYLPHOSPHONOTHIOLATE |
| PRTHN | PARATHION |
| PARTIC | *PARTICULATE MATTER |
| PCB016 | PCB 1016 |
| PCB221 | PCB 1221 |
| PCB232 | PCB 1232 |
| PCB242 | PCB 1242 |
| PCB248 | PCB 1248 |
| PCB254 | PCB 1254 |
| PCB260 | PCB 1260 |
| PCB262 | PCB 1262 |
| CL5BP | *PENTACHLORO BIPHENYLS |
| CL5B | PENTACHLOROBENZENE |
| CL5ET | PENTACHLOROETHANE |
| PCP | PENTACHLOROPHENOL |
| C25 | PENTACOSANE |
| C15 | PENTADECANE |
| C15A | PENTADECANOIC ACID |
| PETN | PENTAERYTHRITOL TETRANITRATE |
| PFP | PENTAFLUOROPHENOL |
| PENTAN | PENTANE |
| C5A | PENTANOIC ACID / VALERIC ACID |
| PA2MBE | PENTANOIC ACID, 2-METHYLBUTYL ESTER |
| PYLD12 | PERYLENE-D12 |
| PH | *PH |
| PHANTR | PHENANTHRENE |
| PHAD10 | PHENANTHRENE-D10 |
| PHENOL | PHENOL |
| PHENLC | *PHENOLICS (NON-SPECIFIC) |
| PHEND5 | PHENOL-D5 |
| PHEND6 | PHENOL-D6 |
| PHXAA | PHENOXYACETIC ACID |
| PHENAA | PHENYLACETIC ACID |
| CX | PHOSGENE OXIME / DICHLOROFORMOXIME |
| CG | PHOSGENE / CARBONYL CHLORIDE |
| PO4 | PHOSPHATE |
| H3PO4 | PHOSPHORIC ACID |

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| PAD4NE | PHOSPHORIC ACID, DIETHYL-4-NITROPHENYL ESTER |
| PAODPE | PHOSPHORIC ACID, OCTYL DIPHENYL ESTER |
| PATPE | PHOSPHORIC ACID, TRIPHENYL ESTER |
| P4 | PHOSPHORUS |
| PHTHL | *PHTHALATES |
| PHTHA | PHthalic ACID / 1,2-BENZENEDICARBOXYLIC ACID |
| PIPER | PIPERIDINE |
| PDMSLX | POLYDIMETHYL SILOXANE / DIMETHYLPOLY SILOXANE |
| PEGE | *POLYETHYLENEGLYCOL ETHERS |
| PAH | *POLYNUCLEAR AROMATIC HYDROCARBONS |
| K | POTASSIUM |
| C3AME | PROPANOIC ACID, METHYL ESTER |
| C3A2MB | PROPANOIC ACID, 2-METHYLBUTYL ESTER |
| PATBUE | PROPANOIC ACID, T-BUTYL ESTER |
| PA2HDE | PROPANOIC ACID, 2-HYDROXYDECYL ESTER |
| PRC6H5 | PROPYLBENZENE |
| POX | *PURGEABLE ORGANIC HALOGENS |
| PYR | PYRENE |
| PYRD10 | PYRENE-D10 |
| REDDY | RED DYE |
| RESACI | *RESIN ACIDS |
| GB | SARIN / ISOPROPYLMETHYL PHOSPHONOFUORIDATE |
| C16SAT | *SATURATED HYDROCARBONS (C16) |
| SE | SELENIUM |
| SIL | SILICONE |
| AG | SILVER |
| SILVEX | SILVEX |
| NA | SODIUM |
| GD | SOMAN / PINACOLYLMETHYL PHOSPHONOFUORIDATE |
| COND | *SPECIFIC CONDUCTIVITY |
| SQUAL | SQUALENE |
| STERO | *STERIODS |
| STIGMA | STIGMASTENAL |
| SR | STRONTIUM |
| STYPH | STYPHNATE ION |
| STYPHA | STYPHNIC ACID |
| STYR | STYRENE |
| SO4 | SULFATE |
| SULFID | SULFIDE |
| SO3 | SULFITE |
| S | SULFUR |
| S2CL2 | SULFUR MONOCHLORIDE |
| SUADME | SULFURIC ACID, DIMETHYL ESTER |
| SUPONA | SUPONA / 2-CHLORO-1-(2,4-DICHLOROPHENYL) VINYL DIETHYL PHOSPHATE |
| DIAEP | S-DIISOPROPYLAMINOETHYLMETHYL PHOSPHONOTHIOATE |
| GA | TABUN / ETHYL-N,N-DIMETHYL PHOSPHORAMIDOCYANIDATE |
| TEMP | *TEMPERATURE |
| TRPD14 | TERPHENYL-d14 |
| TDODTL | TERT-DODECANETHIOL |
| TCB | *TETRACHLORO BENZENES |
| CL4BP | *TETRACHLORO BIPHENYLS |
| TETPT | *TETRACHLORO CYCLOPENTENES |
| CL4NAP | *TETRACHLORO NAPHTHALENES |
| TCLEE | TETRACHLOROETHYLENE / TETRACHLOROETHENE |
| TCOS | TETRACOSANE |
| TDMHSX | TETRADECAMETHYL HEXASILOXANE |
| C14 | TETRADECANE |
| C14A | TETRADECANOIC ACID / MYRISTIC ACID |
| C14AME | TETRADECANOIC ACID, METHYL ESTER |

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| TGLYME | TETRAGLYME |
| THF | TETRAHYDROFURAN |
| THP2ML | TETRAHYDROPYRANYL-2-METHANOL |
| TMUR | TETRAMETHYL UREA |
| TMPHAN | TETRAMETHYLPHENANTHRENE |
| TETR | TETRAZENE |
| TL | THALLIUM |
| TBASDE | THIOBUTYRIC ACID, S-DECYL ESTER |
| SCN | THIOCYANATE |
| TDGCL | THIODIGLYCOL |
| TDGCLA | THIODIGLYCOLIC ACID |
| TPH | THIOPHENE |
| SN | TIN |
| MEC6H5 | TOLUENE |
| MEC6D8 | TOLUENE-D8 |
| TDS | *TOTAL DISSOLVED SOLIDS |
| TOTGAF | *TOTAL GRAVIMETRIC, ACID FRACTION |
| HARD | *TOTAL HARDNESS |
| TOTHG2 | *TOTAL MERCURY |
| TOC | *TOTAL ORGANIC CARBON |
| TOX | *TOTAL ORGANIC HALOGENS |
| TOTPCB | *TOTAL PCBS |
| TPO4 | *TOTAL PHOSPHATES |
| TS | *TOTAL SULFUR |
| TSS | *TOTAL SUSPENDED SOLIDS |
| TOTDDT | *TOTAL VALUE OF ALL DDT, DDE, DDD ISOMERS |
| TVS | *TOTAL VOLATILE SOLIDS |
| TXPHEN | TOXAPHENE |
| T1B2BC | TRANS-1-BROMO-2-BUTYLCYCLOPROPANE |
| TCHDCS | TRANS-1,2-CYCLOHEXANDIOL, CYCLIC SULFITE |
| T12DCE | TRANS-1,2-DICHLOROETHYLENE / TRANS-1,2-DICHLOROETHENE |
| T13DCP | TRANS-1,3-DICHLOROPROPENE |
| T2DEC | TRANS-2-DECENE |
| C30AME | TRIACONTANOIC ACID, METHYL ESTER |
| TBP | TRIBUTYL PHOSPHATE |
| TBA | TRIBUTYLAMINE |
| TRIBZ | *TRICHLORO BENZENES |
| CL3BP | *TRICHLORO BIPHENYLS |
| CL3NAP | *TRICHLORO NAPHTHALENES |
| CL3P | *TRICHLORO PHENOLS |
| CL3C3E | *TRICHLORO PROPENES |
| TCST | *TRICHLORO STYRENES |
| TRIPT | TRICHLOROCYCLOPENTENE |
| TRCLE | TRICHLOROETHYLENE / TRICHLOROETHENE |
| CCL3F | TRICHLOROFLUOROMETHANE |
| C13 | TRIDECANE |
| TEPO4 | TRIETHYL PHOSPHATE |
| TEGLYC | TRIETHYLENE GLYCOL / 2,2'-([1,2-ETHANEDIYL BIS (OXY)] BIS {ETHANOL}) |
| TEGLME | TRIETHYLENE GLYCOL, METHYL ETHER |
| TFAAPE | TRIFLUOROACETIC ACID, 1,5-PENTANEDIYL ESTER |
| CCLF3 | TRIFLUOROCHLOROMETHANE |
| TRXMET | *TRIALO METHANES |
| TRIMBZ | *TRIMETHYL BENZENES |
| ME3C10 | *TRIMETHYL DECANES |
| ME3C6 | *TRIMETHYL HEXANES |
| ME3NAP | *TRIMETHYL NAPHTHALENES |
| TMPO4 | TRIMETHYL PHOSPHATE |
| TMPO3 | TRIMETHYL PHOSPHITE |
| ME3C11 | *TRIMETHYL UNDECANES |

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| TNBISO | *TRINITROBENZENE ISOMER |
| TNTISO | *TRINITROTOLUENE ISOMER |
| TRPHEN | TRIPHENYLENE |
| UNKXXX | *UNKNOWN COMPOUND, XXX = 001 THRU 999 |
| UDMH | UNSYMMETRICAL DIMETHYL HYDRAZINE |
| V | VANADIUM |
| DDVP | VAPONA |
| VARHY | *VARIOUS HYDROCARBONS WITH INCREASING M.W. |
| VFA | VINYL FORMATE |
| WP | WHITE PHOSPHORUS |
| CC3 | XXCC3 |
| XYLEN | *XYLENES |
| YELDY | YELLOW DYE |
| ZN | ZINC |
| ZR | ZIRCONIUM |
| 01NHCL | 0.1 N HYDROCHLORIC ACID |
| 1MPRB | (1-METHYLPROPYL) BENZENE |
| 11DMEB | (1,1-DIMETHYLETHYL) BENZENE |
| 13DMBB | (1,3-DIMETHYLBUTYL) BENZENE |
| SPIRO | (1',5 TRANS)-7-CHLORO-6-HYDROXY-2',4-DIMETHOXY-6'-METHYL- SPIRO [BENZOFURAN-2-(3H)-1'-(2)-CYCLOHEXENE]-3,4'-DIONE |
| 3S5E3L | (3BETA)-STIGMAST-5-EN-3-OL |
| LIPID | *% LIPIDS |
| BZOTRZ | 1H-BENZOTRIAZOLE / 1,2,3-BENZOTRIAZOLE |
| 1A3MPZ | 1-ACETYL-3-METHYL-5-PYRAZOLONE |
| 1A4HMB | 1-ACETYL-4-(1-HYDROXY-1-METHYLETHYL) BENZENE |
| 1BY4HB | 1-BENZYL-4-HYDROXYBENZIMIDAZOLE |
| 1C4L | 1-BUTANOL |
| 1CDMPZ | 1-CARBAMOYL-3,5-DIMETHYL-2-PYRAZOLINE |
| 1CLODC | 1-CHLOROCTADECANE |
| 1CL24H | 1-CHLORO-2,4-HEXADIENE |
| 1DODCL | 1-DODECANOL |
| 1EICOSL | 1-EICOSANOL |
| 1EHB | 1-ETHYLHEXYLBENZENE |
| 1EPB | 1-ETHYLPROPYLBENZENE |
| 1E2MB | 1-ETHYL-2-METHYLBENZENE |
| 1E24DB | 1-ETHYL-2,4-DIMETHYLBENZENE |
| 1FNAP | 1-FLUORONAPHTHALENE |
| 1HPDOL | 1-HEPTADECANOL |
| 1HXE | 1-HEXENE |
| 1HX3OL | 1-HEXEN-3-OL |
| INDAN | 1-HYDROXY-2,3-METHYLENE INDAN |
| 1MX1PE | 1-METHOXY-1-PROPENE |
| 1MBAAN | 1-METHYLBENZ [A] ANTHRACENE |
| 1MCPNE | 1-METHYLCYCLOPENTENE |
| 1MDB | 1-METHYLDECYLBENZENE |
| 1MECHX | 1-METHYLETHYLCYCLOHEXANE |
| 1MECPR | 1-METHYLETHYLCYCLOPROPANE |
| 1MEIND | 1-METHYLINDAN |
| 1MNAP | 1-METHYLNAPHTHALENE |
| 1MNB | 1-METHYLNONYLBENZENE |
| 1MPYR | 1-METHYLPYRENE |
| 1M2PEC | 1-METHYL-2-(2-PROPENYL) CYCLOPENTANE |
| 1M7MEN | 1-METHYL-7-(1-METHYLETHYL) NAPHTHALENE |
| 1MFLRE | 1-METHYL-9H-FLUORENE |
| 1NHP | 1-NITROHEPTANE |
| 1N2ONE | 1-NITRO-2-OCTANONE |
| 1OCTOL | 1-OCTANOL |
| 1PNAP | 1-PHENYLNAPHTHALENE |
| 1C3L | 1-PROPANOL |

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| 1PECHX | 1-PROPENYLCYCLOHEXANE |
| 1TBCHA | 1-T-BUTYLCYCLOHEXANECARBOXYLIC ACID |
| BEETO | 1-(2-BUTOXYETHOXY) ETHANOL |
| 11DCLE | 1,1-DICHLOROETHANE |
| 11DCE | 1,1-DICHLOROETHYLENE / 1,1-DICHLOROETHENE |
| 11C1PE | 1,1-DICHLORO-1-PROPENE |
| 11DPH | 1,1-DIPHENYLHYDRAZINE |
| DNBEE | 1,1-DI-N-BUTYLETHYLENE / 1,1-DI-N-BUTYLETHENE |
| DPETYN | 1,1-(1,2-ETHYNEIDIYL) BIS (BENZENE) |
| 111TCE | 1,1,1-TRICHLOROETHANE |
| 2TCLEA | 1,1,1,2-TETRACHLOROETHANE |
| 112TCE | 1,1,2-TRICHLOROETHANE |
| TCLTFE | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE |
| TFDCLE | 1,1,2-TRIFLUORO-1,2-DICHLOROETHANE |
| TCLEA | 1,1,2,2-TETRACHLOROETHANE |
| 12TMCP | 1,1,2,2-TETRAMETHYLCYCLOPROPANE |
| 113MCH | 1,1,3-TRIMETHYLCYCLOHEXANE |
| MEBPIP | 1,1'-METHYLENE BIS (PIPERIDINE) |
| CHO | 1,2-CYCLOHEXANE OXIDE |
| 12DBRE | 1,2-DIBROMOMETHANE |
| 12DCLB | 1,2-DICHLOROBENZENE |
| 12DBD4 | 1,2-DICHLOROBENZENE-D4 |
| 12DCLE | 1,2-DICHLOROETHANE |
| 12DCD4 | 1,2-DICHLOROETHANE-D4 |
| 12DCE | *1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS) |
| 12DCLP | 1,2-DICHLOROPROPANE |
| 12DMB | 1,2-DIMETHYLBENZENE / O-XYLENE |
| DMCPDE | 1,2-DIMETHYLCYCLOPENTADIENE |
| 12DNAP | 1,2-DIMETHYLNAPHTHALENE |
| 12DPB | 1,2-DIPHENYLBENZENE |
| 12DPH | 1,2-DIPHENYLHYDRAZINE |
| 12EPCH | 1,2-EPOXYCYCLOHEXENE / CYCLOHEXENE OXIDE |
| 12EPFB | 1,2-EPOXYETHYLBENZENE / STYRENE OXIDE |
| 123TCB | 1,2,3-TRICHLOROBENZENE |
| 123CPR | 1,2,3-TRICHLOROPROPANE |
| 123TMB | 1,2,3-TRIMETHYLBENZENE |
| 123MCH | 1,2,3-TRIMETHYLCYCLOHEXANE |
| TCB2 | 1,2,3,4-TETRACHLOROBENZENE |
| THNAP | 1,2,3,4-TETRAHYDRONAPHTHALENE / TETRALIN |
| 1234MB | 1,2,3,4-TETRAMETHYLBENZENE |
| 18O18D | 1,2,3,4,4A,5,8,8A-OCTAHYDRO-1,4,5,8-DIMETHANOLNAPHTHALEN-2-OL |
| PHYCP | 1,2,3,4,5-PENTAHYDROXYCYCLOPENTANE |
| TCB3 | 1,2,3,5-TETRACHLOROBENZENE |
| 124TCB | 1,2,4-TRICHLOROBENZENE |
| 124TMB | 1,2,4-TRIMETHYLBENZENE |
| 124MCH | 1,2,4-TRIMETHYLCYCLOHEXANE |
| TCB1 | 1,2,4,5-TETRACHLOROBENZENE |
| 13CPDO | 1,3-CYCLOPENTADIONE |
| 13DCLB | 1,3-DICHLOROBENZENE |
| 13DBD4 | 1,3-DICHLOROBENZENE-D4 |
| 13DCP | 1,3-DICHLOROPROPANE |
| 13DCPE | 1,3-DICHLOROPROPENE |
| 13DEB | 1,3-DIETHYLBENZENE |
| 13DFB | 1,3-DIFLUOROBENZENE |
| 13DMB | 1,3-DIMETHYLBENZENE / M-XYLENE |
| 13DMCH | 1,3-DIMETHYLCYCLOHEXANE |
| 13DNAP | 1,3-DIMETHYLNAPHTHALENE |
| 13DNB | 1,3-DINITROBENZENE |
| 13DPPR | 1,3-DIPHENYLPROPANE / 1,1'-(1,3-PROPANEDIYL) BIS (BENZENE) |

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| 135TMB | 1,3,5-TRIMETHYLBENZENE |
| 135MCH | 1,3,5-TRIMETHYLCYCLOHEXANE |
| 135TNB | 1,3,5-TRINITROBENZENE |
| 14DACB | 1,4-DIACETYLBENZENE |
| 14DCLB | 1,4-DICHLOROBENZENE |
| 14DBD4 | 1,4-DICHLOROBENZENE-D4 |
| 14DCBU | 1,4-DICHLOROBUTANE |
| 14DFB | 1,4-DIFLUOROBENZENE |
| 14DMNP | 1,4-DIHYDRO-1,4-METHANONAPHTHALENE |
| 14DMXA | 1,4-DIMETHOXYANTHRACENE |
| 14DMCH | 1,4-DIMETHYLCYCLOHEXANE |
| 14D2EB | 1,4-DIMETHYL-2-ETHYLBENZENE |
| 14DNB | 1,4-DINITROBENZENE |
| 14DIOX | 1,4-DIOXANE |
| 14HXDE | 1,4-HEXADIENE |
| OXAT | 1,4-OXATHIANE |
| BIDBI | 1,5-BIS (1,1-DIMETHYLETHYL)-3,3-DIMETHYLBICYCLO {3.1.0} HEXANE-2-ONE |
| 15DNAP | 1,5-DIMETHYLNAPHTHALENE |
| 16DMIN | 1,6-DIMETHYLLINDAN |
| 16DNAP | 1,6-DIMETHYLNAPHTHALENE |
| 167TMN | 1,6,7-TRIMETHYLNAPHTHALENE |
| 18DNAP | 1,8-DIMETHYLNAPHTHALENE |
| 10CUDM | 10-CYCLOPENTYLUNDECANOIC ACID, METHYL ESTER |
| 10MUDM | 10-METHYLUNDECANOIC ACID, METHYL ESTER |
| 10OEME | 10-OCTADECENOIC ACID, METHYL ESTER |
| 10MEOH | 10% METHANOL |
| 12MTDM | 12-METHYLTETRADECANOIC ACID, METHYL ESTER |
| 13TDAM | 13-TETRADECYNOIC ACID, METHYL ESTER |
| 14MPME | 14-METHYLPENTADECANIC ACID, METHYL ESTER |
| 15MHME | 15-METHYLHEXADECANOIC ACID, METHYL ESTER |
| TCSAME | 15-TETRACOSENOIC ACID, METHYL ESTER |
| 16MHME | 16-METHYLHEPTADECANOIC ACID, METHYL ESTER |
| 17PTCE | 17-PENTATRIACONTENE |
| DTCHBO | 1.ALPHA.(E),4.ALPHA.-1-(1,4-DIHYDROXY-2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)-2-BUTEN-1-ONE |
| 1NKCL | 1.0 N POTASSIUM CHLORIDE |
| 2NKCL | 2.0 N POTASSIUM CHLORIDE |
| 2A46DA | 2-AMINO-4,6-DINITROANILINE |
| 2A46DT | 2-AMINO-4,6-DINITROTOLUENE |
| 2BRHXA | 2-BROMOHEXANOIC ACID |
| 2B1CP | 2-BROMO-1-CHLOROPROPANE |
| 2C4E | 2-BUTENE |
| 2BUXEL | 2-BUTOXYETHANOL |
| BEP | 2-BUTOXYETHANOL PHOSPHATE |
| 2BUTHF | 2-BUTYLTETRAHYDROFURAN |
| 2BNMNM | 2-BUTYL-N-METHYLNORLEUCINE, METHYL ESTER |
| 2B1OOL | 2-BUTYL-1-OCTANOL |
| CBA | 2-CHLOROBENZALDEHYDE |
| CBOA | 2-CHLOROBENZOIC ACID |
| 2CBMN | 2-CHLOROBENZYLIDINEMALONONITRILE |
| 2CLBP | 2-CHLOROBIPHENYL |
| 2CLEVE | 2-CHLOROETHYLVINYL ETHER / (2-CHLOROETHOXY) ETHENE |
| 2CNAP | 2-CHLORONAPHTHALENE |
| 2CLP | 2-CHLOROPHENOL |
| 2CLPD4 | 2-CHLOROPHENOL-D4 |
| 2CLT | 2-CHLOROTOLUENE |
| CLVRA | 2-CHLOROVINYL ARSONIC ACID |
| 2C6MPZ | 2-CHLORO-6-METHOXY-10H-PHENOTHIAZINE |
| 2CHE1L | 2-CYCLOHEXEN-1-OL |

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|--------|--|
| 2CHE10 | 2-CYCLOHEXEN-1-ONE |
| 2CHAE | 2-CYCLOPENTENE-1-HEXANOIC ACID, ETHYL ESTER |
| 2ECYBL | 2-ETHYLCYCLOBUTANOL |
| 2EC6A | 2-ETHYLHEXANOIC ACID |
| 2EP | 2-ETHYLPHENOL |
| MPDDD | 2-(META-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE |
| OPDDD | 2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE |
| OPDDE | 2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHENE |
| OPDDT | 2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1,1-TRICHLOROETHANE |
| 2B4MFU | 2-(T-BUTYL)-4-METHYLFURAN |
| 2MENAP | 2-(1-METHYLETHYL) NAPHTHALENE |
| 2CECHO | 2-(2-CYANOETHYL) CYCLOHEXANONE |
| 2MXEXL | 2-(2-METHOXYETHOXY) ETHANOL / DIETHYLENEGLYCOL MONOMETHYLETHYER |
| 2BEETO | 2-(2-N-BUTOXYETHOXY) ETHANOL |
| 2PXEXL | 2-(2-PHENOXYETHOXY) ETHANOL |
| 210DMU | 2,10-DIMETHYLBUTANE |
| BCPHCE | 2,2-BIS (CHLOROPHENYL) CHLOROETHYLENE |
| 2BEMDE | 2,2-BIS (ETHYLMERCAPTO) DIETHYL ETHER |
| 2BMMPR | 2,2-BIS (METHYLMERCAPTO) PROPANE |
| PPDDD | 2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE |
| PPDDE | 2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE |
| PPDDT | 2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE |
| PPTDE | 2,2-BIS (PARA-CHLOROPHENYL)-2-PHENYL-1,1-DICHLOROETHENE |
| 22DMC4 | 2,2-DIMETHYLBUTANE |
| 2DMPEN | 2,2-DIMETHYLPENTANE |
| DM1ACH | 2,2-DIMETHYL-1-ACETYLCYCLOHEXANE |
| DMPTHF | 2,2-DIMETHYL-5-(1-METHYLPROPYL) TETRAHYDROFURAN |
| 23TMP | 2,2,3,3-TETRAMETHYLPENTANE |
| 24T13P | 2,2,4-TRIMETHYL-1,3-PENTANEDIOL |
| 247HOI | 2,2,4,4,7,7-HEXAMETHYLOCTAHYDRO-1H-INDENE |
| 226TMO | 2,2,6-TRIMETHYLOCTANE |
| TMODEO | 2,2,7,7-TETRAMETHYL-4,5-OCTADIEN-3-ONE |
| 25OCCB | 2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL |
| 26HPCB | 2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL |
| 25HXCB | 2,2',3,4,5,5'-HEXACHLOROBIPHENYL |
| 25HPCB | 2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL |
| 245PCB | 2,2',4,5,5'-PENTACHLOROBIPHENYL |
| 225TCB | 2,2',5-TRICHLOROBIPHENYL |
| 2255CB | 2,2',5,5'-TETRACHLOROBIPHENYL |
| 23DCLP | 2,3-DICHLOROPHENOL |
| 23C1PE | 2,3-DICHLORO-1-PROPENE |
| 23DMC4 | 2,3-DIMETHYLBUTANE |
| 23DNAP | 2,3-DIMETHYLNAPHTHALENE |
| 23DMC5 | 2,3-DIMETHYLPENTANE |
| 23DMP | 2,3-DIMETHYLPHENOL |
| 23D2HL | 2,3-DIMETHYL-2-HEXANOL |
| TM3PL | 2,3,4-TRIMETHYL-3-PENTANOL |
| TRMTDE | 2,3,4-TRIMETHYL-4-TETRADECENE |
| 2345CB | 2,3,4,5-TETRACHLOROBIPHENYL |
| 2346CP | 2,3,4,6-TETRACHLOROPHENOL |
| 235TMD | 2,3,5-TRIMETHYLDECANE |
| 2356CP | 2,3,5,6-TETRACHLOROPHENOL |
| 236TMN | 2,3,6-TRIMETHYLNAPHTHALENE |
| 237TMO | 2,3,7-TRIMETHYLOCTANE |
| TCDD | 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN / DIOXIN |

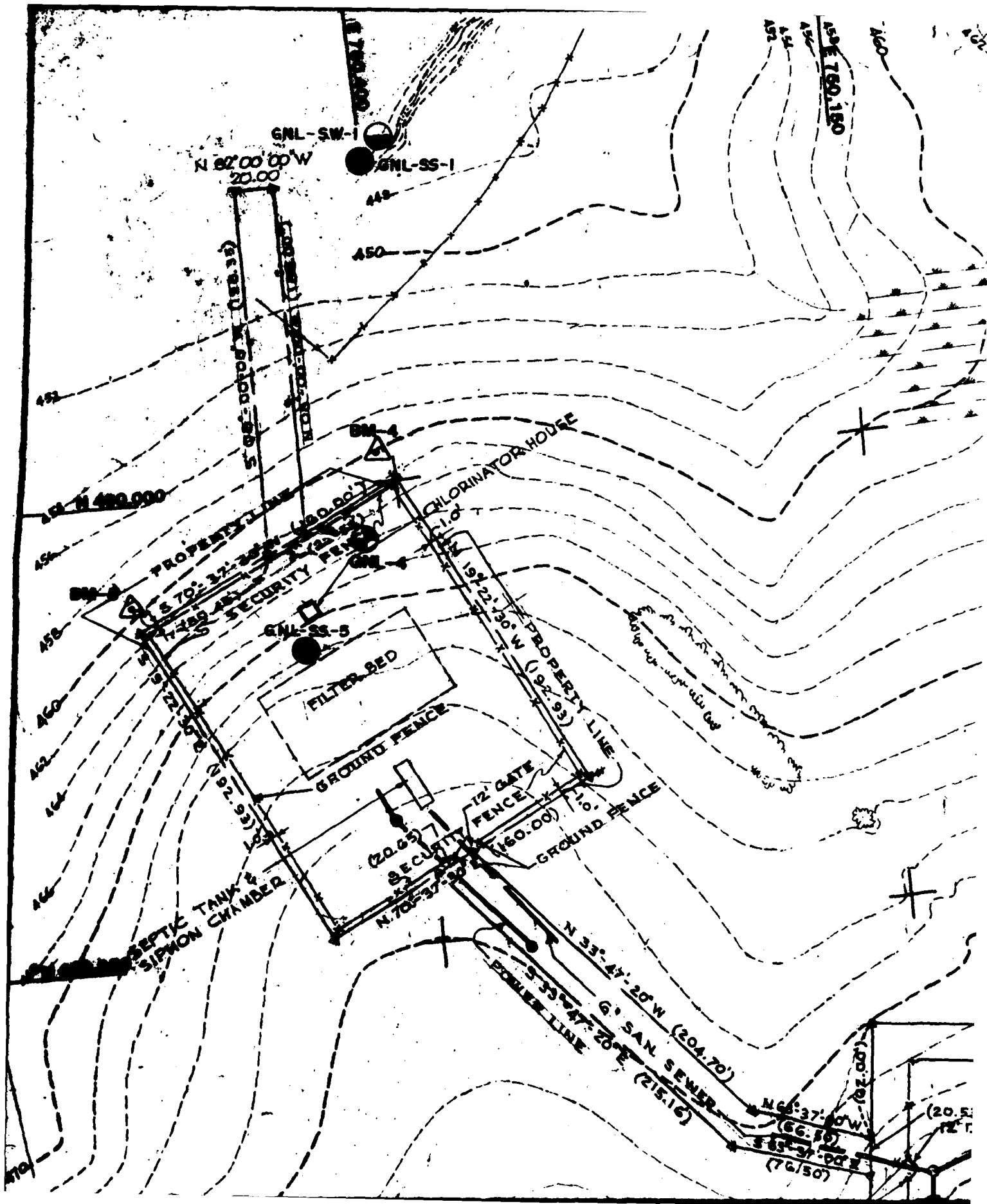
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| 24DCLP | 2,4-DICHLOROPHENOL |
| 24D | 2,4-DICHLOROPHENOXYACETIC ACID |
| DBATTS | 2,4-DIHYDROXYBENZOIC ACID, TRIS-TRIMETHYSILYL |
| 24DMD | 2,4-DIMETHYLDECANE |
| 24DMHX | 2,4-DIMETHYLHEXANE |
| 24DMC5 | 2,4-DIMETHYLPENTANE |
| 24DMPN | 2,4-DIMETHYLPHENOL |
| 24M2PL | 2,4-DIMETHYL-2-PENTANOL |
| 24DNP | 2,4-DINITROPHENOL |
| 24NPD3 | 2,4-DINITROPHENOL-D3 |
| 24DNT | 2,4-DINITROTOLUENE |
| 245TCP | 2,4,5-TRICHLOROPHENOL |
| 245T | 2,4,5-TRICHLOROPHENOXYACETIC ACID |
| 246MPY | 2,4,6-TRIMETHYLPYRIDINE |
| 246TBP | 2,4,6-TRIBROMOPHENOL |
| 246TCA | 2,4,6-TRICHLOROANILINE |
| 246TCP | 2,4,6-TRICHLOROPHENOL |
| 246TMO | 2,4,6-TRIMETHYLOCTANE |
| ATNBA | 2,4,6-TRINITROBENZALDEHYDE |
| 246TNP | 2,4,6-TRINITROPHENOL / PICRIC ACID |
| 246TNR | 2,4,6-TRINITRORESORCINOL / STYPNIC ACID |
| 246TNT | 2,4,6-TRINITROTOLUENE |
| 247TMO | 2,4,7-TRIMETHYLOCTANE |
| 24DCB | 2,4'-DICHLOROBIPHENYL |
| 25C14D | 2,5-CYCLOHEXADIEN-1,4-DIONE |
| 25DCLP | 2,5-DICHLOROPHENOL |
| 25DMPA | 2,5-DIMETHYLPHENANTHRENE |
| 25DMP | 2,5-DIMETHYLPHENOL |
| 25DTHF | 2,5-DIMETHYLTETRAHYDROFURAN |
| 256TMD | 2,5,6-TRIMETHYLDECANE |
| 26DCLP | 2,6-DICHLOROPHENOL |
| 26DMO | 2,6-DIMETHYLOCTANE |
| 26DMP | 2,6-DIMETHYLPHENOL |
| 26DMST | 2,6-DIMETHYLSTYRENE |
| 26DMUD | 2,6-DIMETHYLUNDECANE |
| 26DNA | 2,6-DINITROANILINE |
| 26DNT | 2,6-DINITROTOLUENE |
| DTB4C | 2,6-DI-TERT-BUTYL-4-CRESOL |
| 26DBMP | 2,6-DI-T-BUTYL-4-METHYLPHENOL |
| 2TMHPD | 2,6,10,14-TETRAMETHYLHEPTADECANE |
| 2TMPD | 2,6,10,14-TETRAMETHYLPENTADECANE |
| HMTCHE | 2,6,10,15,19,23-HEXAMETHYL-2,6,10,14,18,22-TETRACOSAHEXAENE |
| 2611MD | 2,6,11-TRIMETHYLDODECANE |
| 27DNAP | 2,7-DIMETHYLNAPHTHALENE |
| 27DMO | 2,7-DIMETHYLOCTANE |
| 29DMUD | 2,9-DIMETHYLUNDECANE |
| 3BPETH | 3-BUTENYLPENTYL ETHER |
| 3CLP | 3-CHLOROPHENOL |
| 3CLT | 3-CHLOROTOLUENE |
| 3C1C3E | 3-CHLORO-1-PROPENE / ALLYL CHLORIDE |
| 3CHXD | 3-CYCLOHEXYLDECANE |
| 3EP | 3-ETHYLPHENOL |
| 3EHXDE | 3-ETHYL-1,4-HEXADIENE |
| 3E22MP | 3-ETHYL-2,2-DIMETHYLPENTANE / 3-(T-BUTYL)-PENTANE |
| 3E25DH | 3-ETHYL-2,5-DIMETHYL-3-HEXENE |
| 3EEBOD | 3-ETHYL-5-(2-ETHYLBUTYL) OCTADECANE |
| 3HXE2O | 3-HEXEN-2-ONE |
| 3HDMPT | 3-HYDROXY-2,7-DIMETHYL-4-{3H}-PTERIDINONE |
| 3MXIMZ | 3-METHOXYIMIDAZOLE |
| 3MXT | 3-METHOXYTOLUENE |

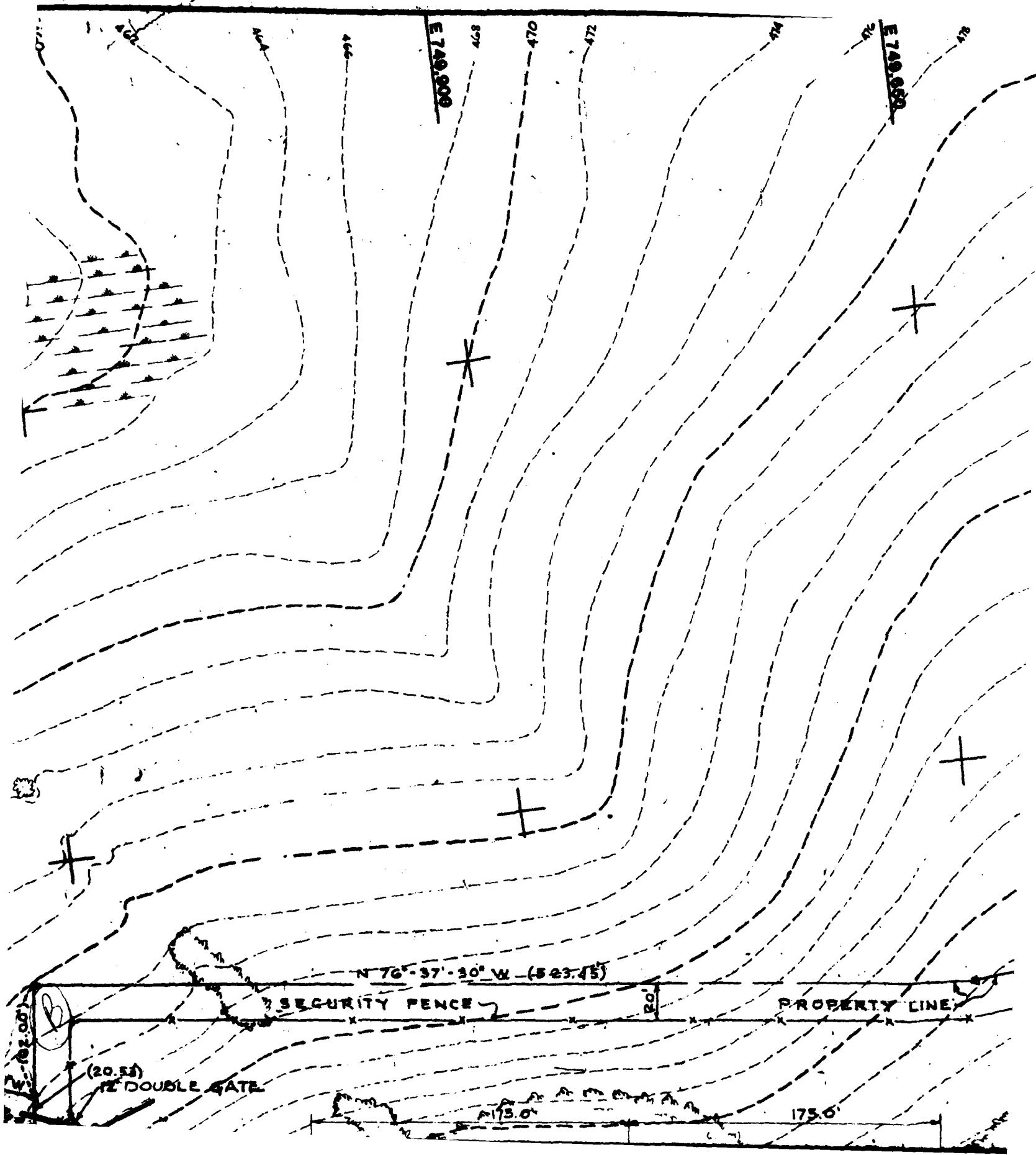
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| 3M2C10 | 3-METHOXY-2-CYCLOPENTEN-1-ONE |
| 3MBP | 3-METHYLBIPHENYL |
| MBADOE | 3-METHYLBUTANOIC ACID, 3,7-DIMETHYL-2,4,6-OCTATRIENYL ESTER |
| 3MCHRY | 3-METHYLCHRYSENE |
| 3MC6 | 3-METHYLHEXANE |
| 3MEPEN | 3-METHYLPENTANE |
| 3MPANR | 3-METHYLPHENANTHRENE |
| 3MP | 3-METHYLPHENOL / 3-CRESOL |
| 3MUND | 3-METHYLUNDECANE |
| 3M1PL | 3-METHYL-1-PENTANOL |
| 3M2CHO | 3-METHYL-2-CYCLOHEXEN-1-ONE |
| 3M2HXL | 3-METHYL-2-HEXANOL |
| 3M2C5E | 3-METHYL-2-PENTENE |
| 3M5PNN | 3-METHYL-5-PROPYLNONANE |
| 3NANIL | 3-NITROANILINE |
| 3NT | 3-NITROTOLUENE |
| 3OCTOL | 3-OCTANOL |
| 3OPPAE | 3-OKO-3-PHENYLPROPANOIC ACID, ETHYL ESTER |
| EDBDAS | 3-PHENYLPROPANOL |
| 3PC3AC | 3-PHENYLPROPANOYL CHLORIDE / HYDROCINNAMYL CHLORIDE |
| 3PT | 3-PROPYLTOLUENE |
| BZ | 3-QUINUCLIDINYL BENZILATE |
| 3CMCH | 3-(CHLOROMETHYL) CYCLOHEXENE |
| 3HDMPL | 3-(HYDROXYMETHYL)-4,4-DIMETHYLPENTANAL |
| 3TBUP | 3-(T-BUTYL) PHENOL |
| DMPCHE | 3-(2,2-DIMETHYLPROPOXY) CYCLOHEXENE |
| 33DMHX | 3,3-DIMETHYLHEXANE |
| 33DMPN | 3,3-DIMETHYLPENTANE |
| TMHPDO | 3,3,6-TRIMETHYL-1,5-HEPTADIEN-4-ONE |
| 33DCBD | 3,3'-DICHLOROBENZIDINE |
| 34CBD6 | 3,3',4,4'-TETRACHLOROBIPHENYL-D6 |
| 34DCLP | 3,4-DICHLOROPHENOL |
| DHBZPY | 3,4-DIHYDRO-2H-1-BENZOPYRAN |
| 34DMP | 3,4-DIMETHYLPHENOL |
| 34D1DE | 3,4-DIMETHYL-1-DECENE |
| 3EE2BO | 3,4-EPOXY-3-ETHYL-2-BUTANONE |
| 344TPE | 3,4,4-TRIMETHYL-2-PENTENE |
| 345T1H | 3,4,5-TRIMETHYL-1-HEXENE |
| 36TMPA | 3,4,5,6-TETRAMETHYLPHENANTHRENE |
| 35DMF | 3,5-DIMETHYLPHENOL |
| 3DCHEO | 3,5-DIMETHYL-2-CYCLOHEXEN-1-ONE |
| 35M3HL | 3,5-DIMETHYL-3-HEXANOL |
| 35DNA | 3,5-DINITROANILINE |
| 35DNP | 3,5-DINITROPHENOL |
| 35DNT | 3,5-DINITROTOLUENE |
| TMTCON | 3,5,24-TRIMETHYLTETRACONTANE |
| TMHXL | 3,5,5-TRIMETHYL-1-HEXANOL |
| 3TCHEO | 3,5,5-TRIMETHYL-2-CYCLOHEXEN-1-ONE |
| 36DF9O | 3,6-DICHLOROFLUOREN-9-ONE |
| 37DMNN | 3,7-DIMETHYLNONANE |
| 38DMUD | 3,8-DIMETHYLUNDECANE |
| 4AMORP | 4-ACETYLMORPHOLINE |
| 4A35DT | 4-AMINO-3,5-DINITROTOLUENE |
| 4BFB | 4-BROMOFLUOROBENZENE |
| 4BRPPE | 4-BROMOPHENYLPHENYL ETHER |
| 4B3P2O | 4-BUTOXY-3-PENTEN-2-ONE |
| 4CANIL | 4-CHLOROANILINE |
| 4CCHXL | 4-CHLOROCYCLOHEXANOL |
| CPMS | 4-CHLOROPHENYLMETHYL SULFIDE |
| CPMSO2 | 4-CHLOROPHENYLMETHYL SULFONE |

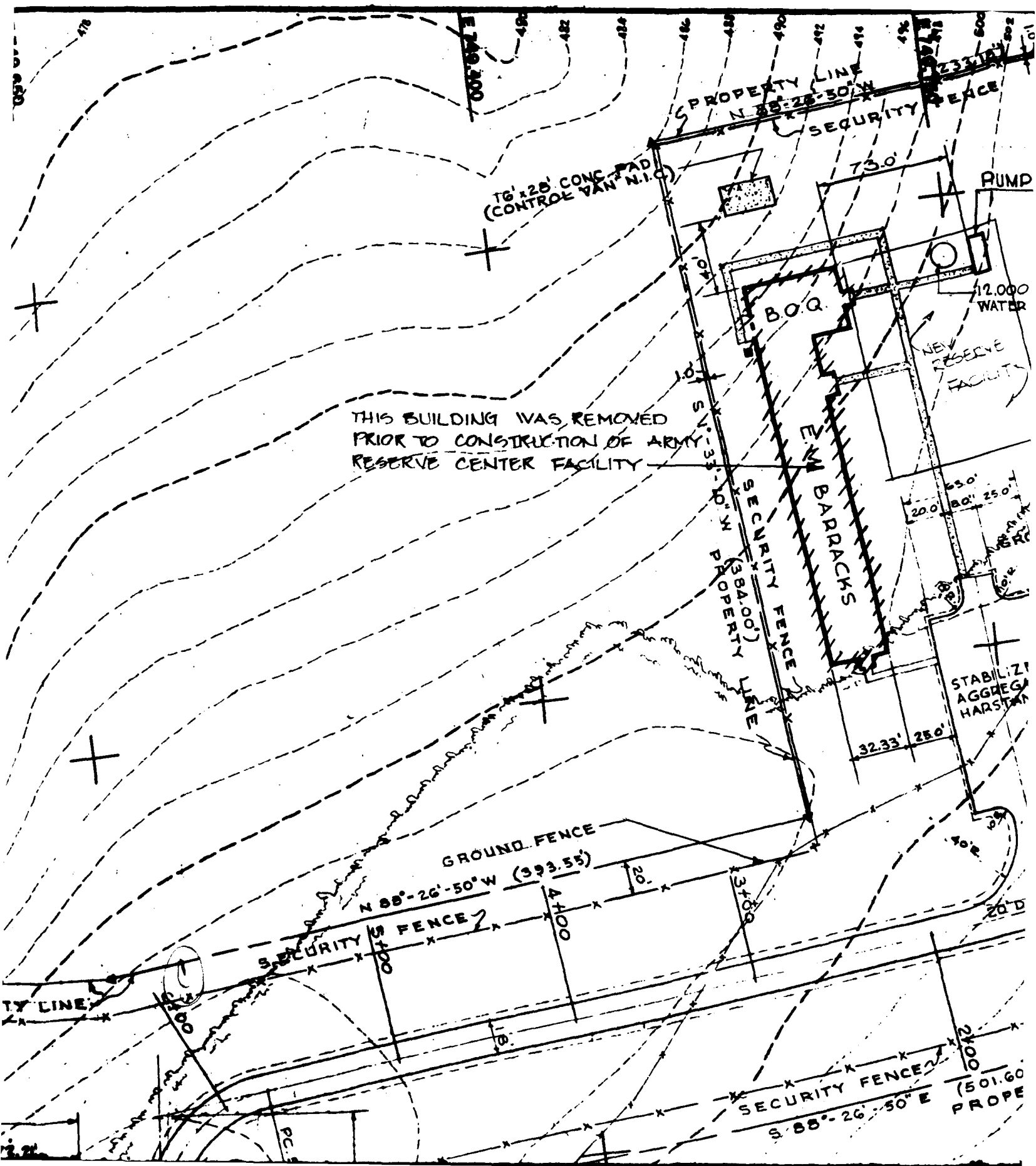
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| CPMSO | 4-CHLOROPHENYLMETHYL SULFOXIDE |
| 4CLPPE | 4-CHLOROPHENYLPHENYL ETHER |
| 4CLT | 4-CHLOROTOLUENE |
| 4CL2C | 4-CHLORO-2-CRESOL / 2-METHYL-4-CHLOROPHENOL |
| 4CL3C | 4-CHLORO-3-CRESOL / 3-METHYL-4-CHLOROPHENOL |
| 4C3MBE | 4-CHLORO-3-METHYL-1-BUTENE |
| PCYMEN | 4-CYMENE / 4-(1-METHYLETHYL) TOLUENE |
| 4E2OCE | 4-ETHYL-2-OCTENE |
| 4ETMHP | 4-ETHYL-2,2,6,6-TETRAMETHYLHEPTANE |
| 4FANIL | 4-FLUOROANILINE |
| 4FT | 4-FLUOROTOLUENE |
| 4HAZOB | 4-HYDROXYAZOBENZENE |
| 4HYBA | 4-HYDROXYBENZALDEHYDE |
| 4H3MBA | 4-HYDROXY-3-METHOXYBENZALDEHYDE / VANILLIN |
| 4H35BA | 4-HYDROXY-3,5-DIMETHOXYBENZALDEHYDE |
| 4IOMQU | 4-IODOMETHYLQUINULCIDINE |
| 4MXCHL | 4-METHOXYCYCLOHEXANOL |
| 4MXP | 4-METHOXYPHENOL |
| 4MBSA | 4-METHYLBENZENE SULFONAMIDE |
| 4MBP | 4-METHYLBIPHENYL |
| 4MDBFU | 4-METHYLDIBENZOFURAN |
| 4MC7 | 4-METHYLHEPTANE |
| 4MPANR | 4-METHYLPHENANTHRENE |
| 4MP | 4-METHYLPHENOL / 4-CRESOL |
| 4MPYR | 4-METHYLPYRENE |
| 4MMBHE | 4-METHYL-1-(1-METHYLETHYL)-BICYCLO [3.1.0] HEX-2-ENE |
| 4M2PPL | 4-METHYL-2-PROPYL-1-PENTANOL |
| 4MFLRE | 4-METHYL-9H-FLUORENE |
| 4NANIL | 4-NITROANILINE |
| 4NP | 4-NITROPHENOL |
| TSAHPE | 4-TOLUENESULFONIC ACID, HEPTYL ESTER |
| 4TBU2C | 4-T-BUTYL-2-CRESOL / 2-METHYL-4-(T-BUTYL)-PHENOL |
| 4TOP | 4-T-OCTYLPHENOL |
| 41MEHP | 4-(1-METHYLETHYL) HEPTANE |
| 4MENPA | 4-(1-METHYLETHYL)-N-PHENYLANILINE |
| 44DCBZ | 4,4'-DICHLOROBENZOPHENONE |
| 44DFBZ | 4,4'-DIFLUOROBENZOPHENONE |
| 44DMUD | 4,4-DIMETHYLUDECANE |
| 4DM2PL | 4,4-DIMETHYL-2-PENTANOL |
| 44DMPE | 4,4-DIMETHYL-2-PENTENE |
| DBTSPY | 4,5-DIMETHYL-2,6-BIS (TRIMETHYLSILOXY) PYRIMIDINE |
| HXHEMAZ | 4,5,6,7,8,8A-HEXAHYDRO-8A-METHYL-2-{1H}-AZULENONE |
| 46DN2C | 4,6-DINITRO-2-CRESOL / 2-METHYL-4,6-DINITROPHENOL |
| 468T1N | 4,6,8-TRIMETHYL-1-NONENE |
| 47DMUD | 4,7-DIMETHYLUDECANE |
| 48DMHD | 4,8-DIMETHYLUDECANE |
| 5CL2C | 5-CHLORO-2-CRESOL / 2-METHYL-5-CHLOROPHENOL |
| 5E2MHP | 5-ETHYL-2-METHYLHEPTANE |
| 5E5MD | 5-ETHYL-5-METHYLDECANE |
| MBZCAC | 5-METHYLBENZO {C} ACRIDINE |
| 5M2HXO | 5-METHYL-2-HEXANONE |
| 5M5HAL | 5-METHYL-5-HYDROXYHEXANOIC ACID LACTONE |
| 5N2OL | 5-NORBORNEN-2-OL |
| 5PTRID | 5-PROPYLTRIDECANE |
| DCMBF | 5,7-DICHLORO-2-METHYLBENZOFURAN |
| 50H50A | 50% HEXANE - 50% ACETONE |
| 50M50A | 50% METHYLENE CHLORIDE - 50% ACETONE |
| 50WMAN | 50% WATER - 25% METHANOL - 25% ACETONITRILE |
| NAOHME | 50% 1M NAOH - 50% METHANOL |
| 6CL3C | 6-CHLORO-3-CRESOL / 3-METHYL-6-CHLOROPHENOL |

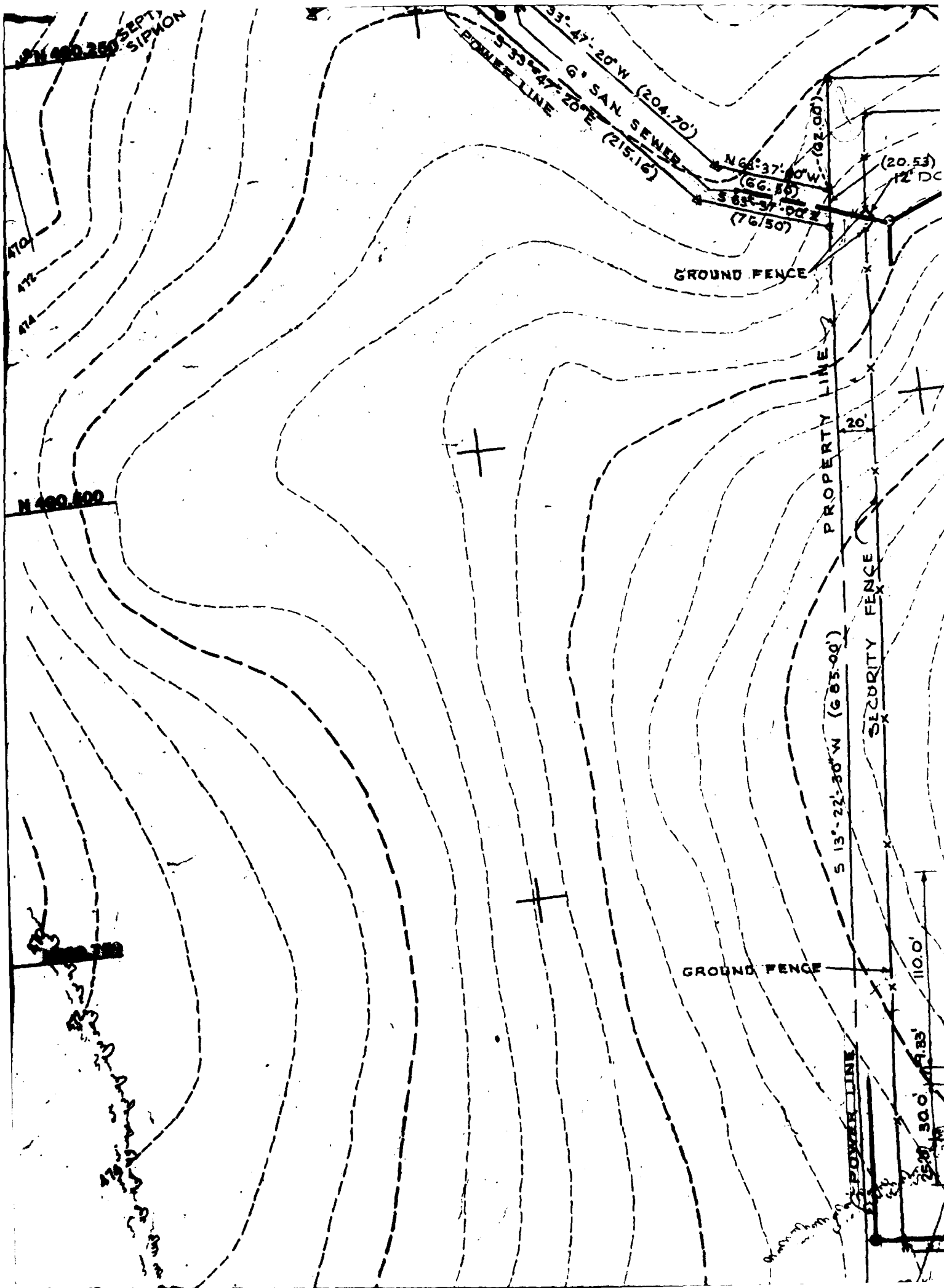
| | |
|--------|--|
| 6E6MFV | 6-ETHYL-6-METHYLFULVENE |
| 6MEPUR | 6-METHYLPURINE |
| 6MTRID | 6-METHYLTRIDECANE |
| 6M3HPL | 6-METHYL-3-HEPTANOL |
| 6TBU2C | 6-T-BUTYL-2-CRESOL / 2-METHYL-6-(T-BUTYL) PHENOL |
| HYNB | 7-HYDROXYNORBORNADIENE |
| 7MTRID | 7-METHYLTRIDECANE |
| C12AMM | 8-METHYLDECANOIC ACID, METHYL ESTER |
| 8MNNDL | 8-METHYL-1,8-NONANEDIOL |
| CARBAZ | 9H-CARBAZOLE |
| ANTRCN | 9-ANTHRACENECARBONITRILE |
| 9FLENO | 9-FLUORENONE |
| 9MXANT | 9-METHOXYANTHRACENE |
| 9MBAAN | 9-METHYLBENZ [A] ANTHRACENE |
| DHDMAC | 9,10-DIHYDRO-9,9-DIMETHYLACRIDINE |

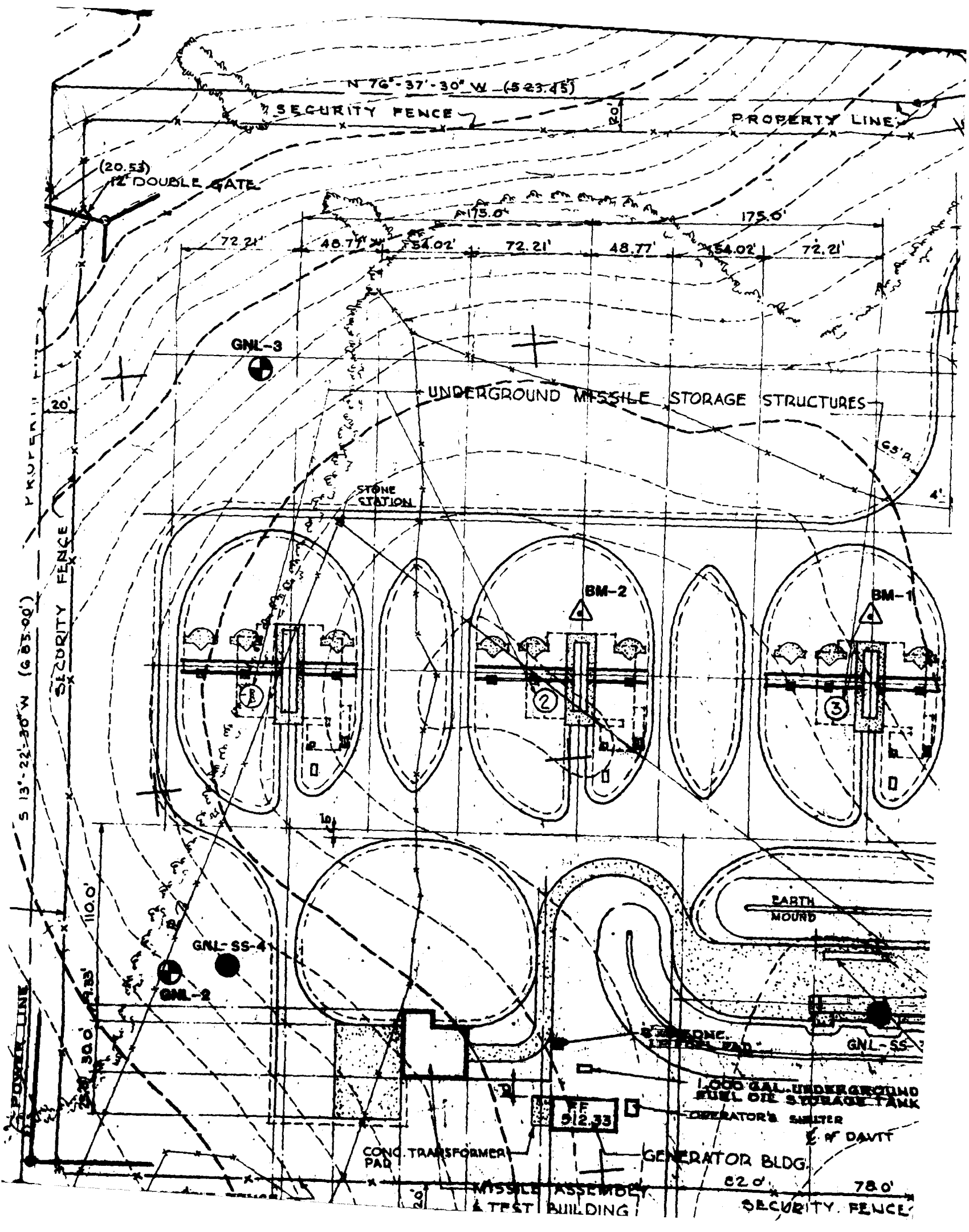
*DENOTES GENERIC TEST NAME

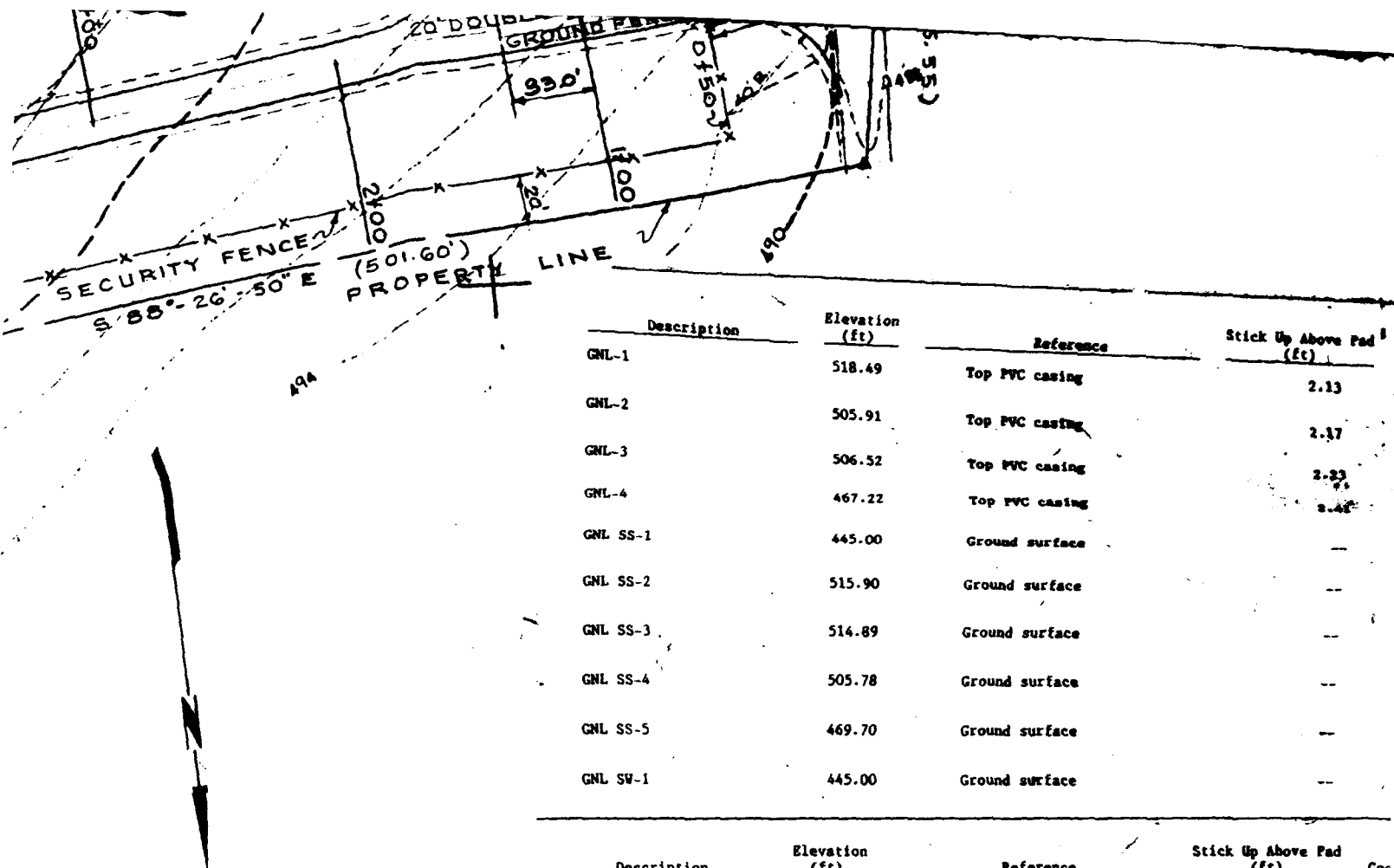












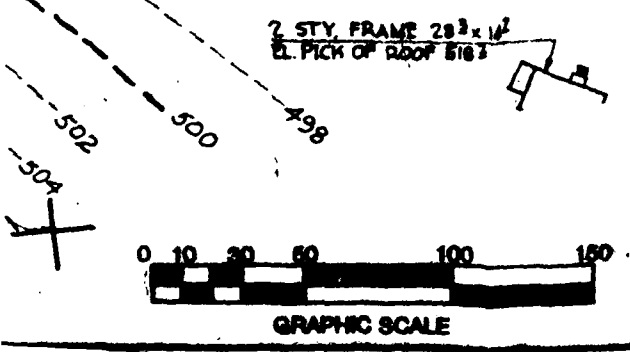
| Description | Elevation (ft) | Reference | Stick Up Above Pad (ft) |
|-------------|----------------|----------------|-------------------------|
| GNL-1 | 518.49 | Top PVC casing | 2.13 |
| GNL-2 | 505.91 | Top PVC casing | 2.17 |
| GNL-3 | 506.52 | Top PVC casing | 2.23 |
| GNL-4 | 467.22 | Top PVC casing | 2.46 |
| GNL SS-1 | 445.00 | Ground surface | -- |
| GNL SS-2 | 515.90 | Ground surface | -- |
| GNL SS-3 | 514.89 | Ground surface | -- |
| GNL SS-4 | 505.78 | Ground surface | -- |
| GNL SS-5 | 469.70 | Ground surface | -- |
| GNL SW-1 | 445.00 | Ground surface | -- |

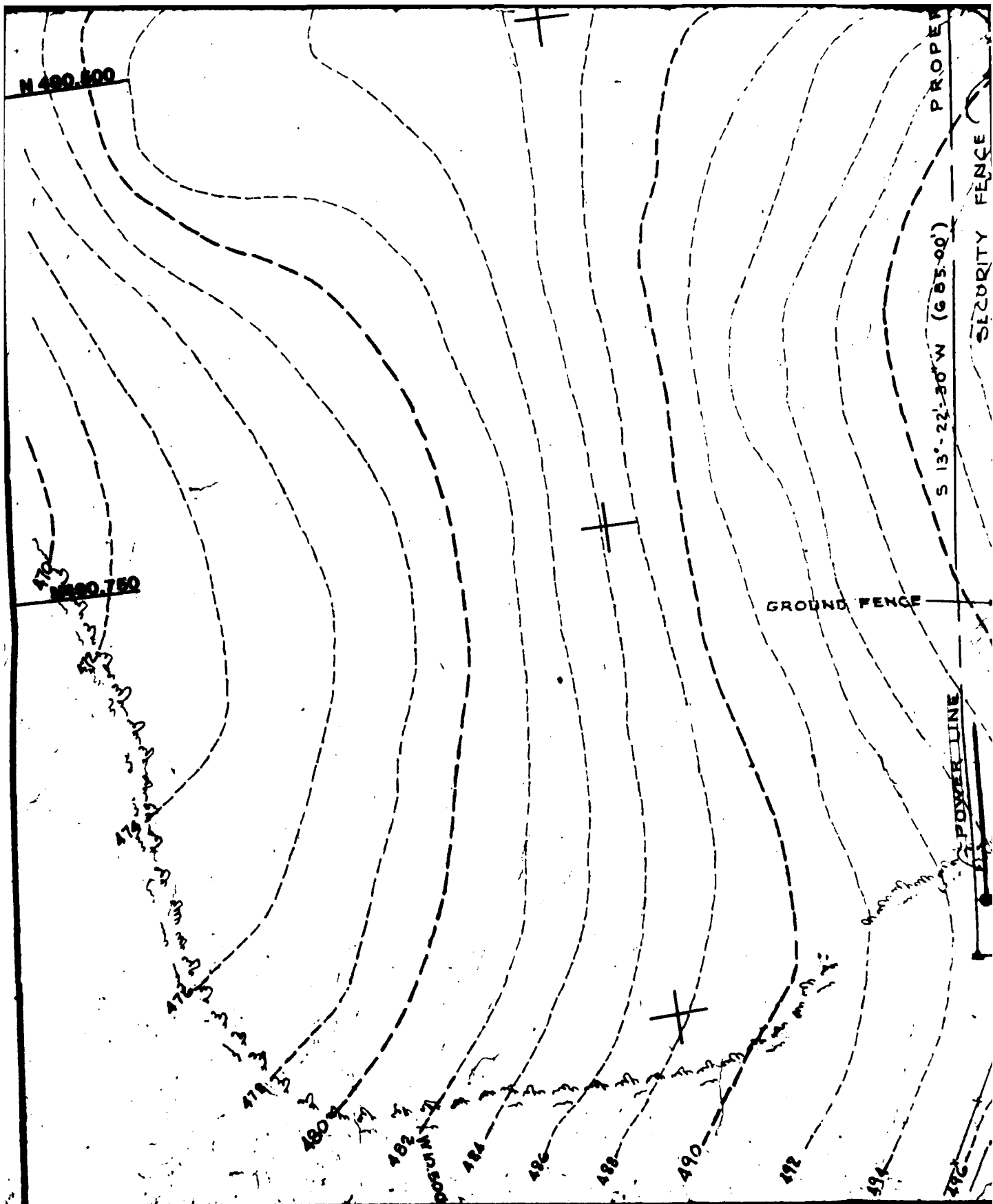
| Description | Elevation (ft) | Reference | Stick Up Above Pad (ft) | Cod |
|---|----------------|--------------------------------------|-------------------------|---------|
| BM 1 | -- | Paint mark on concrete | -- | N45 E74 |
| BM 2 | -- | Paint mark on concrete | -- | N46 E7 |
| Finished Floor of Transformer Generator Bldg. | 512.33 | Generator bldg. finished floor | -- | -- |
| Finished Floor of Chlorination House | 469.48 | Finished floor of Chlorination House | -- | -- |

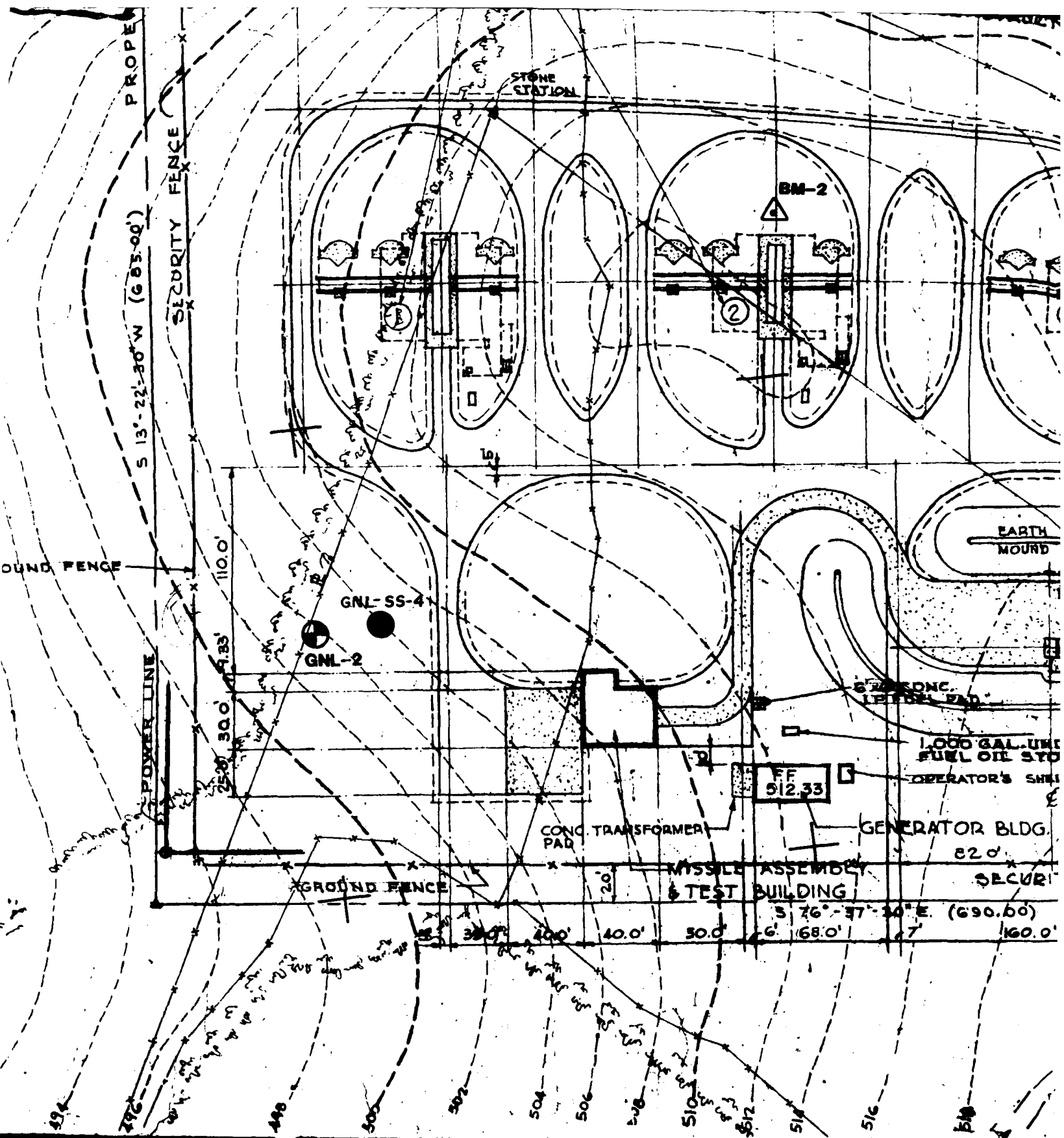
- GENERAL NOTES:**
1. Drawing based on Army Corps of Engineers, Washington District, Washington, D.C., Master Plan, Information Maps, Detail Boundary Map, Drawing Number 18-02-47.
 2. Coordinates established by EA Survey May 1989. Based on State Planar Coordinate System. Site was established from off site BM A572 and BM 17232 using Washington Suburban Sanitary Commis. Datum.
 3. All elevations refer to Mean Sea Level Datum.
 4. Finished floor elevation of generator building was used to establish elevations of those well launch site. Finished floor elevation of chlorination house was used to establish elevation and SS-5.
 5. GNL designation refers to Gaithersburg NIKK Launch.

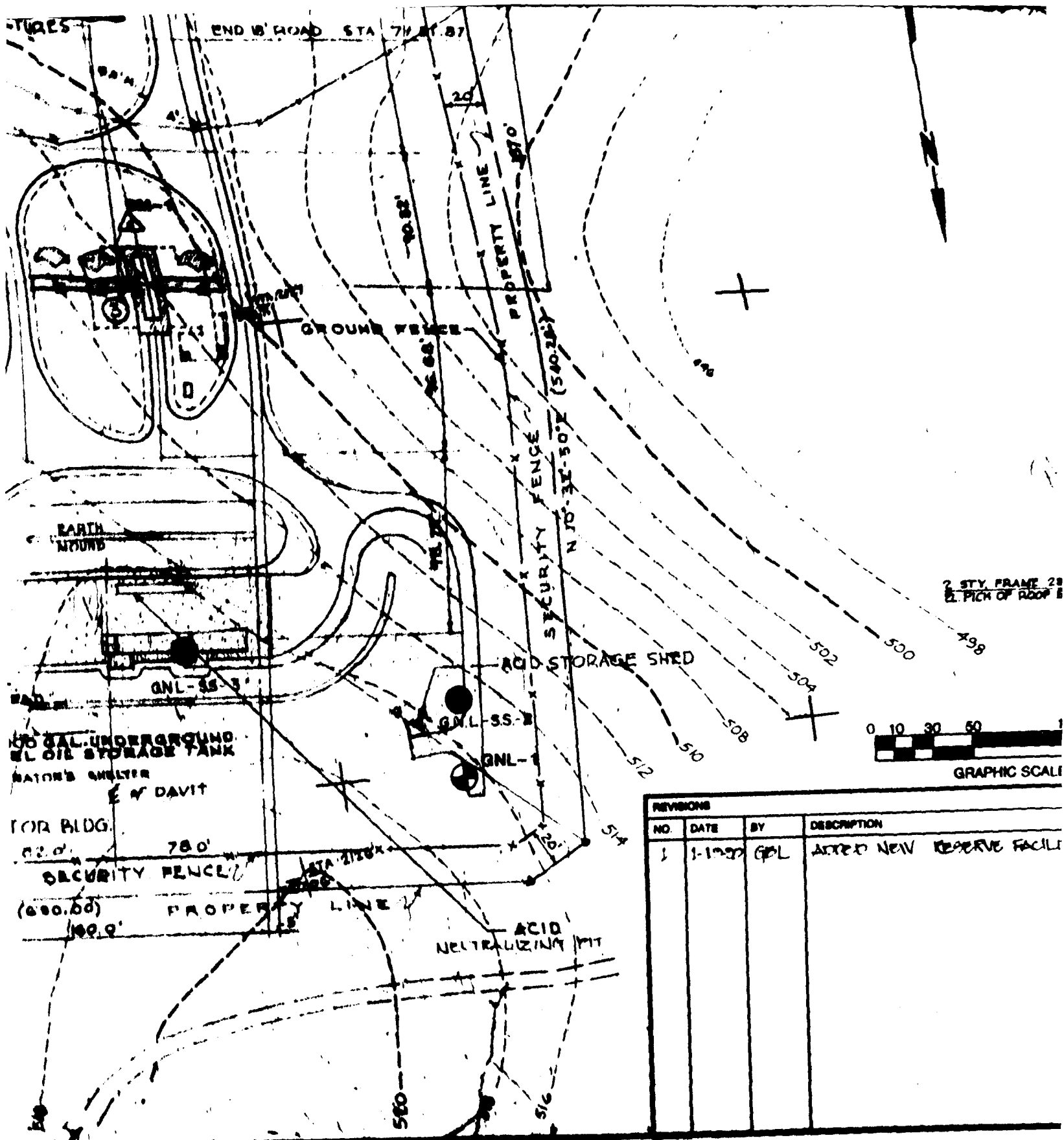
LEGEND

- SOIL SAMPLE
- SURFACE WATER
- ⊕ MONITORING WELL
- △ BENCH MARK









2. STY. FRAME 28
2. PICK OF ROOF 8



| REVISIONS | | | |
|-----------|--------|-----|--------------------------|
| NO. | DATE | BY | DESCRIPTION |
| 1 | 1-1-97 | GEL | ADDED NEW RESERVE FACILI |

| | | | | |
|----------|--------|----------------|----|--------------------|
| GNL SS-4 | 505.78 | Ground surface | -- | E749724 |
| GNL SS-5 | 469.70 | Ground surface | -- | N490859 E750114 |
| GNL SW-1 | 445.00 | Ground surface | -- | N490089 E750460 |
| | | | -- | N499830 E750400 |

| Description | Elevation (ft) | Reference | Stick Up Above Pad (ft) | Coordinates |
|---|----------------|--------------------------------------|-------------------------|--------------------|
| BM 1 | -- | Paint mark on concrete | -- | N490680 E749789 |
| BM 2 | -- | Paint mark on concrete | -- | N490662 E749884 |
| Finished Floor of Transformer Generator Bldg. | 512.33 | Generator bldg. finished floor | -- | -- |
| Finished Floor of Chlorination House | 469.48 | Finished floor of Chlorination House | -- | -- |

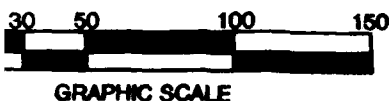
GENERAL NOTES:

1. Drawing based on Army Corps of Engineers, Washington District, Washington, D.C., Master Plan, Basic Information Maps, Detail Boundary Map, Drawing Number 18-02-67.
2. Coordinates established by EA Survey May 1989. Based on State Planar Coordinate System. Site control was established from off site BM A572 and BM 17232 using Washington Suburban Sanitary Commission 1973 Datum.
3. All elevations refer to Mean Sea Level Datum.
4. Finished floor elevation of generator building was used to establish elevations of those wells at the launch site. Finished floor elevation of chlorination house was used to establish elevations of GNL-4 and SS-5.
5. GNL designation refers to Gaithersburg NIKER Launch.

LEGEND

- SOIL SAMPLE
- SURFACE WATER
- ⊕ MONITORING WELL
- △ BENCH MARK

2 STY. FRAME 28' x 14'
EL. PICK OF ROOF 516.1



RESERVE FACILITY

GAITHERSBURG NIKER LAUNCH
GAITHERSBURG, MD.

SITE MAP

DESIGN

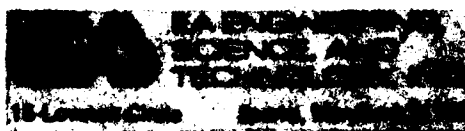
DRAWN

PMS

CHECKED

SAS

PROJECT ENGINEER



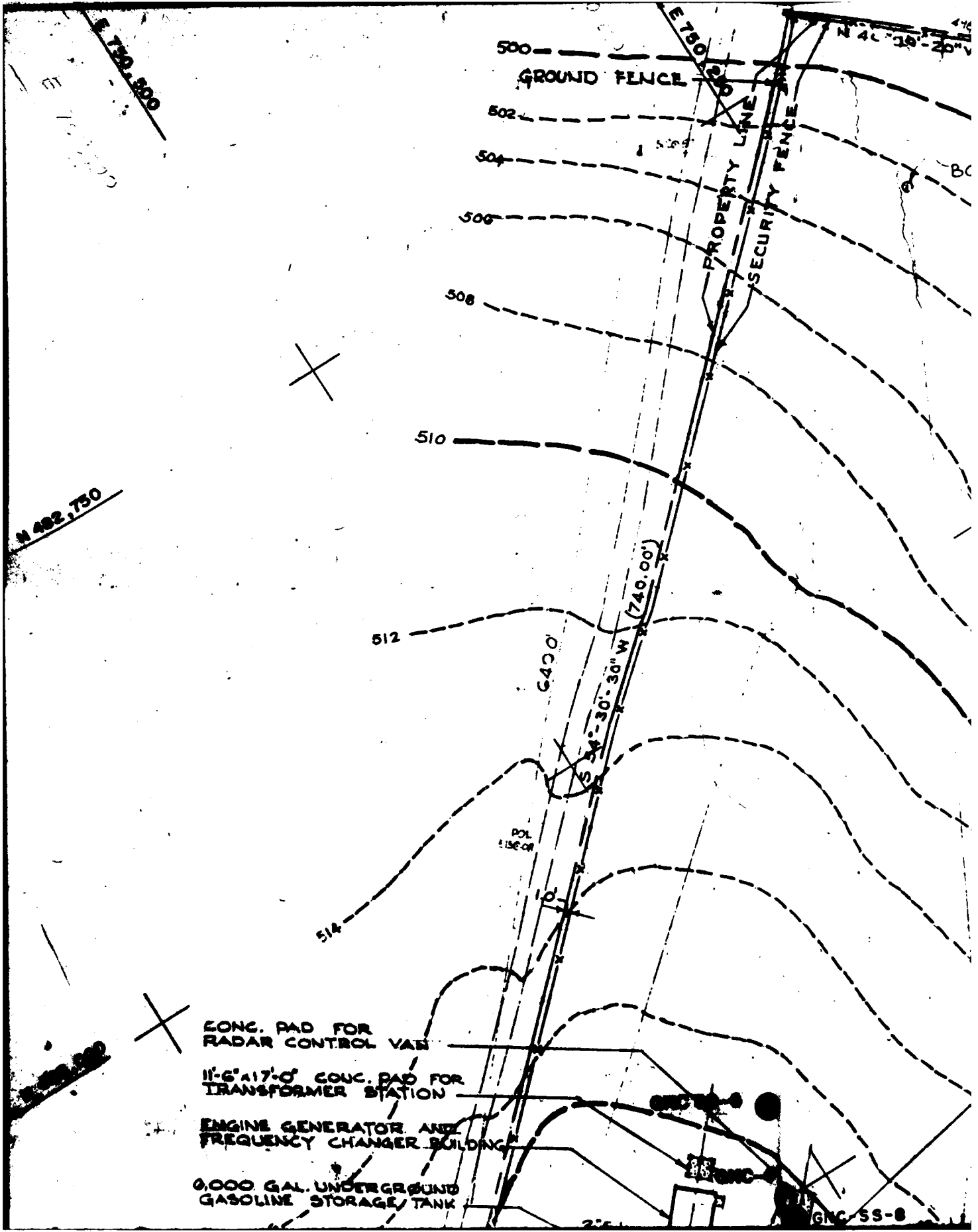
DATE

OCT. 6, 1989

SCALE

PROJECT NO.

18-02-67



500 ———
GROUND FENCE

502 ———

504 ———

506 ———

508 ———

510 ———

512 ———

514 ———

PROPERTY LINE

SECURITY FENCE

6400'
S 34° 30' 30" W (740.00')

POL
EISEN

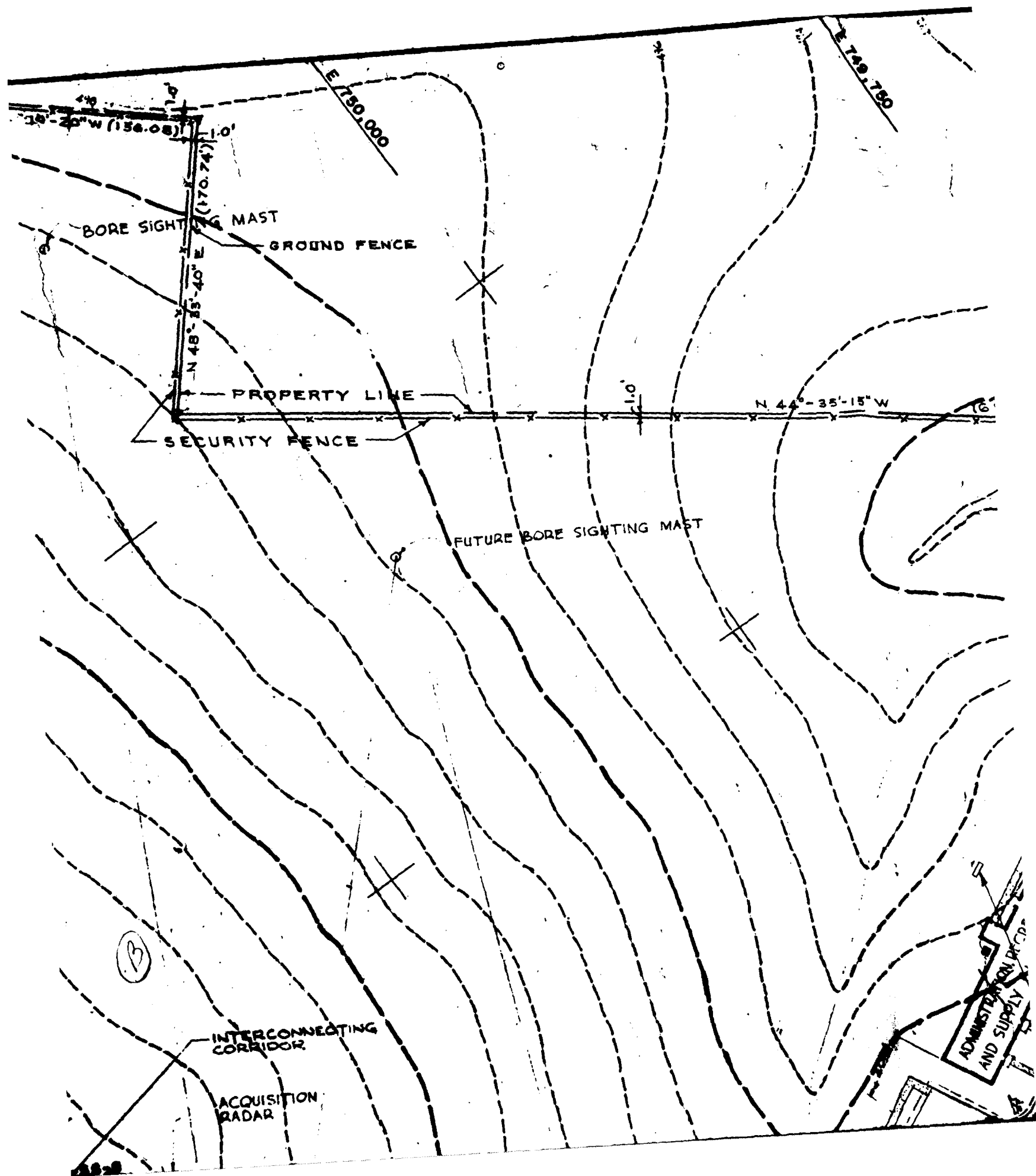
LONG. PAD FOR
RADAR CONTROL VAN

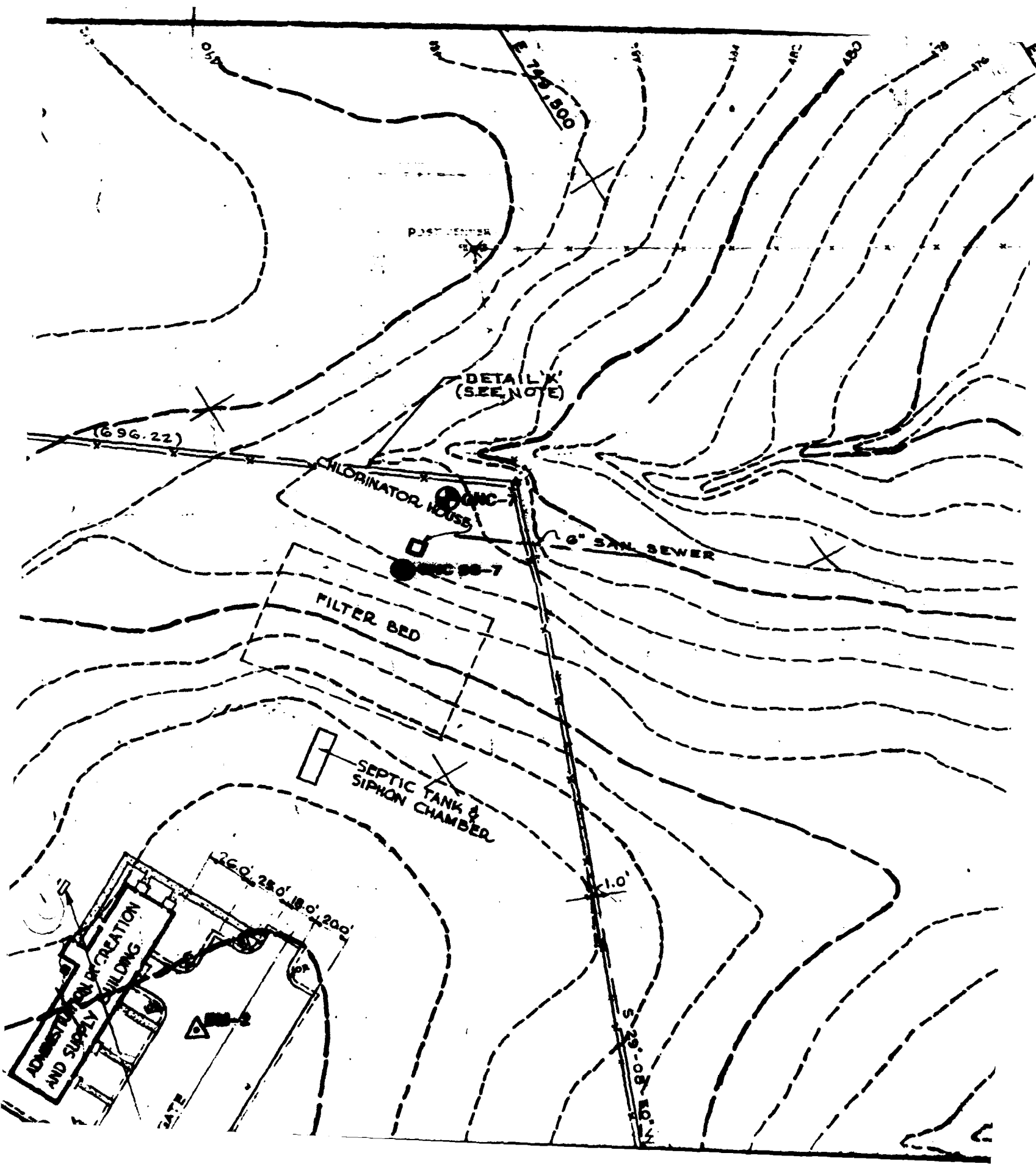
11'-6" x 17'-0" CONC. PAD FOR
TRANSFORMER STATION

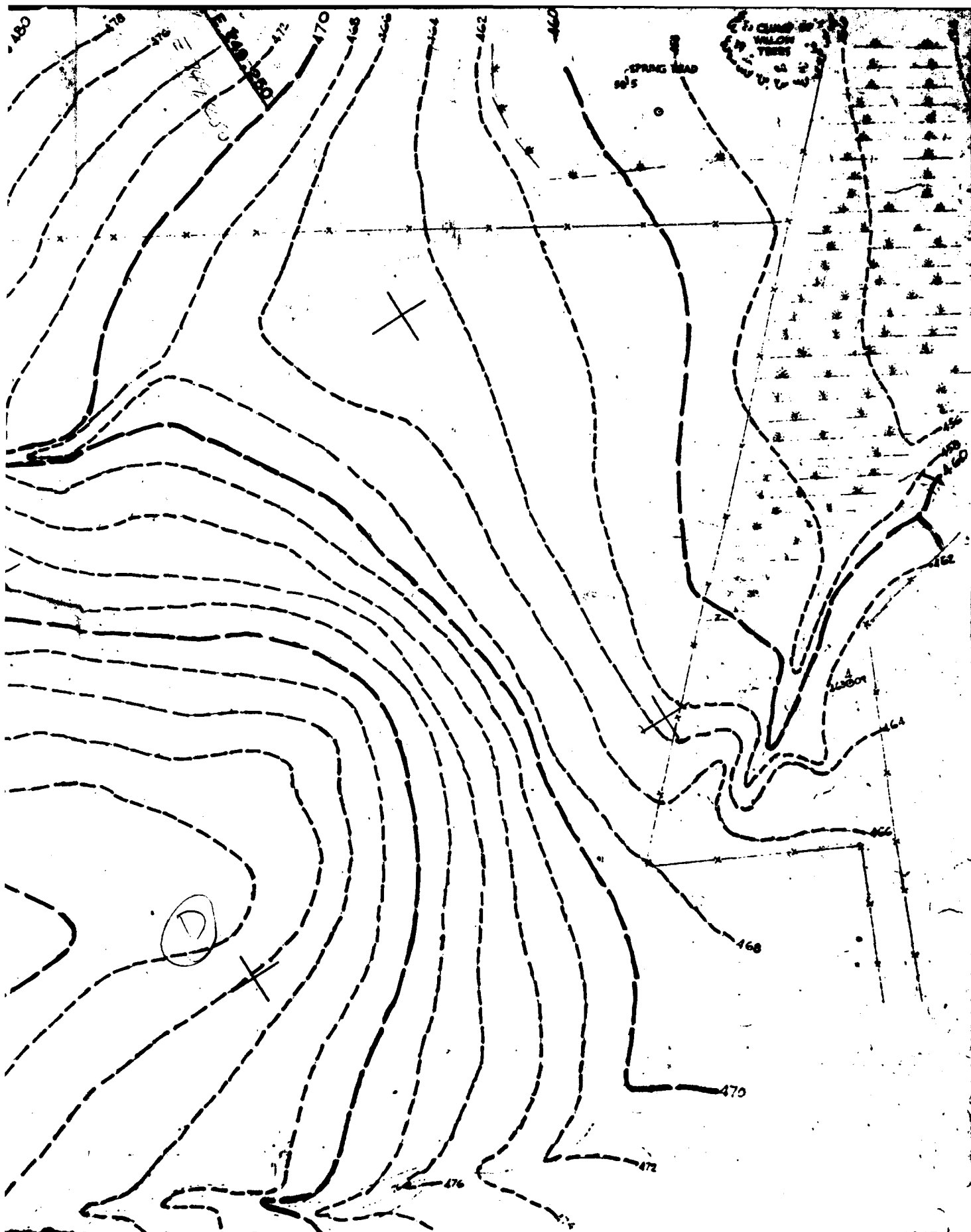
ENGINE GENERATOR AND
FREQUENCY CHANGER BUILDING

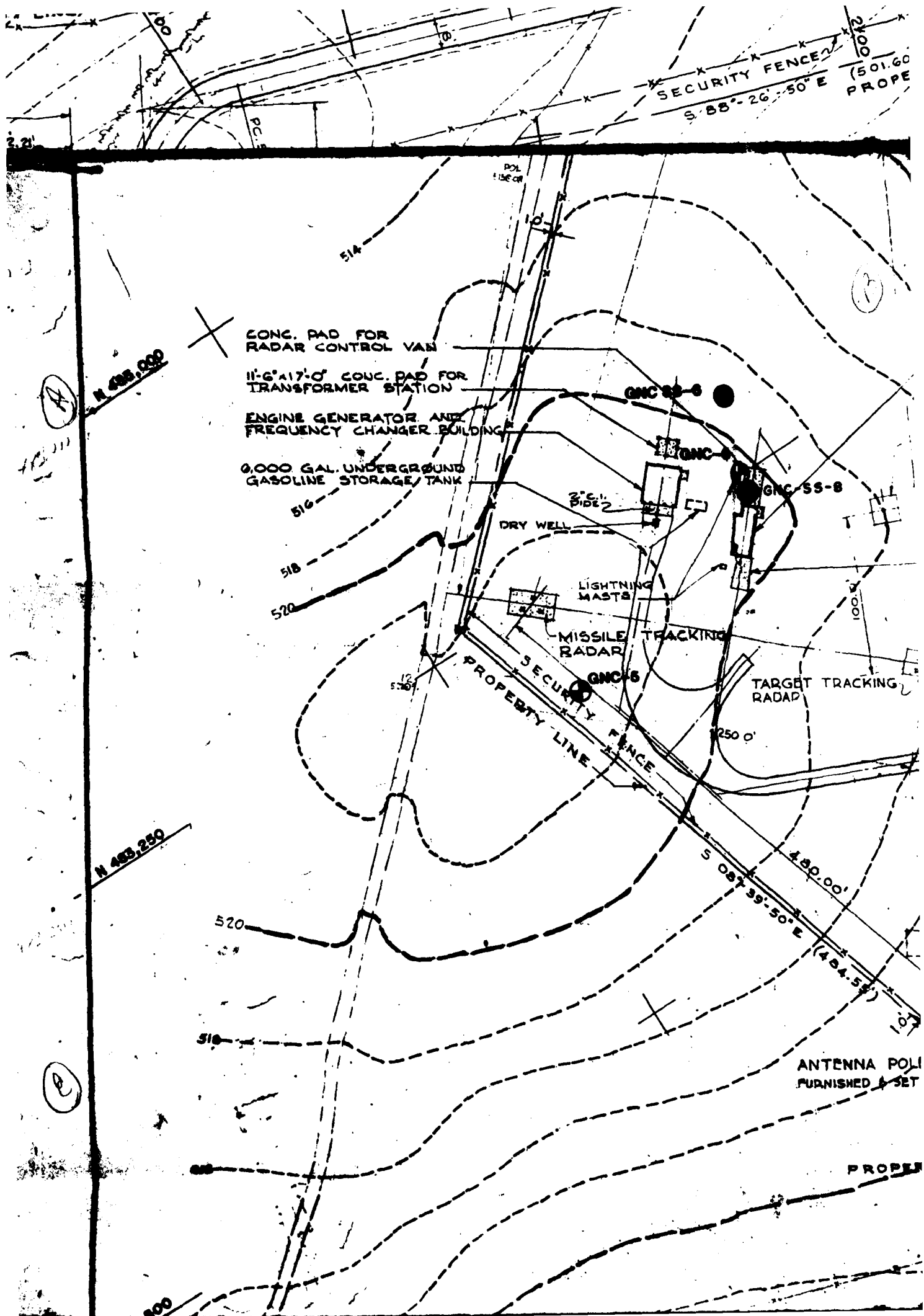
9,000 GAL. UNDERGROUND
GASOLINE STORAGE TANK

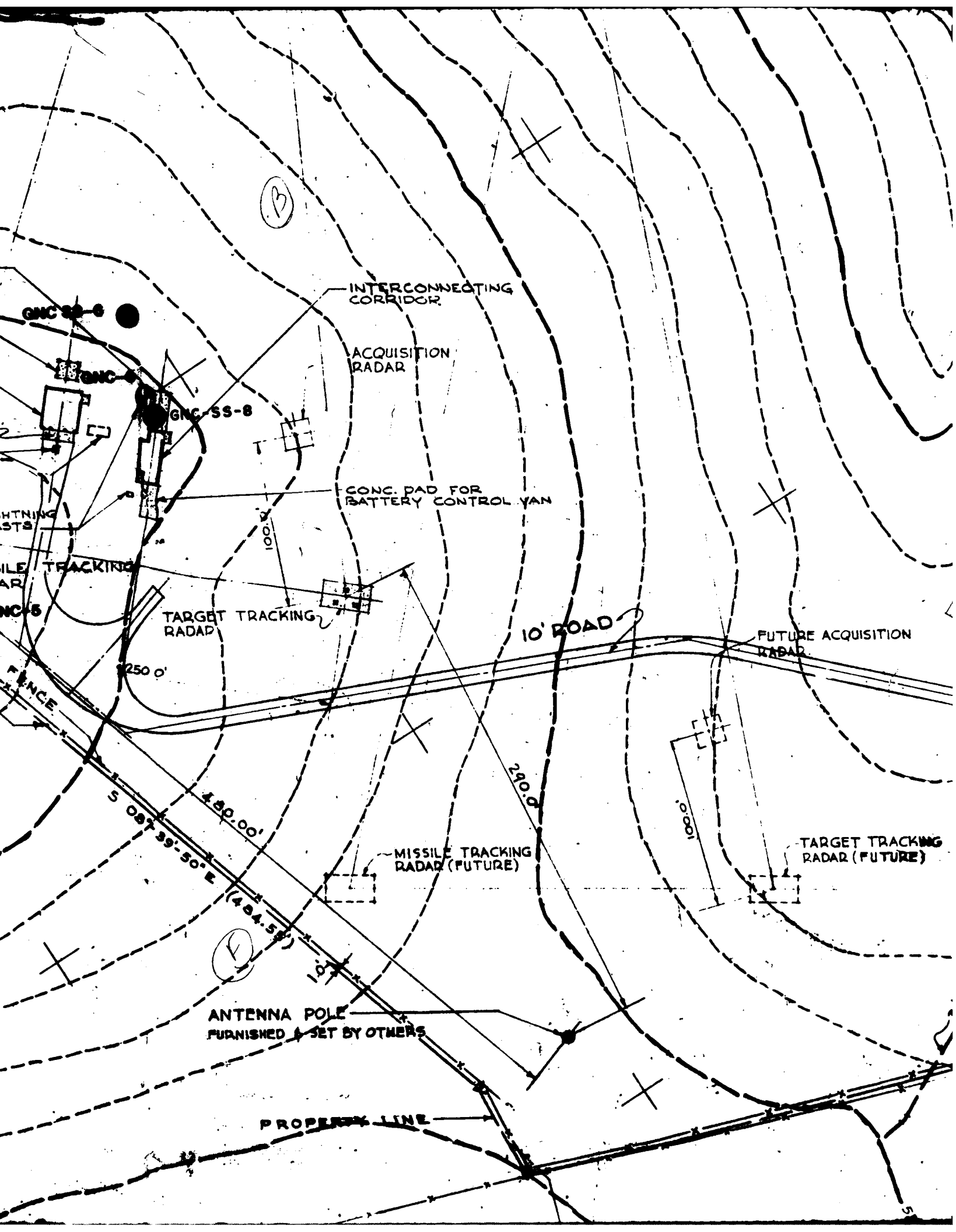
GNC SS-8

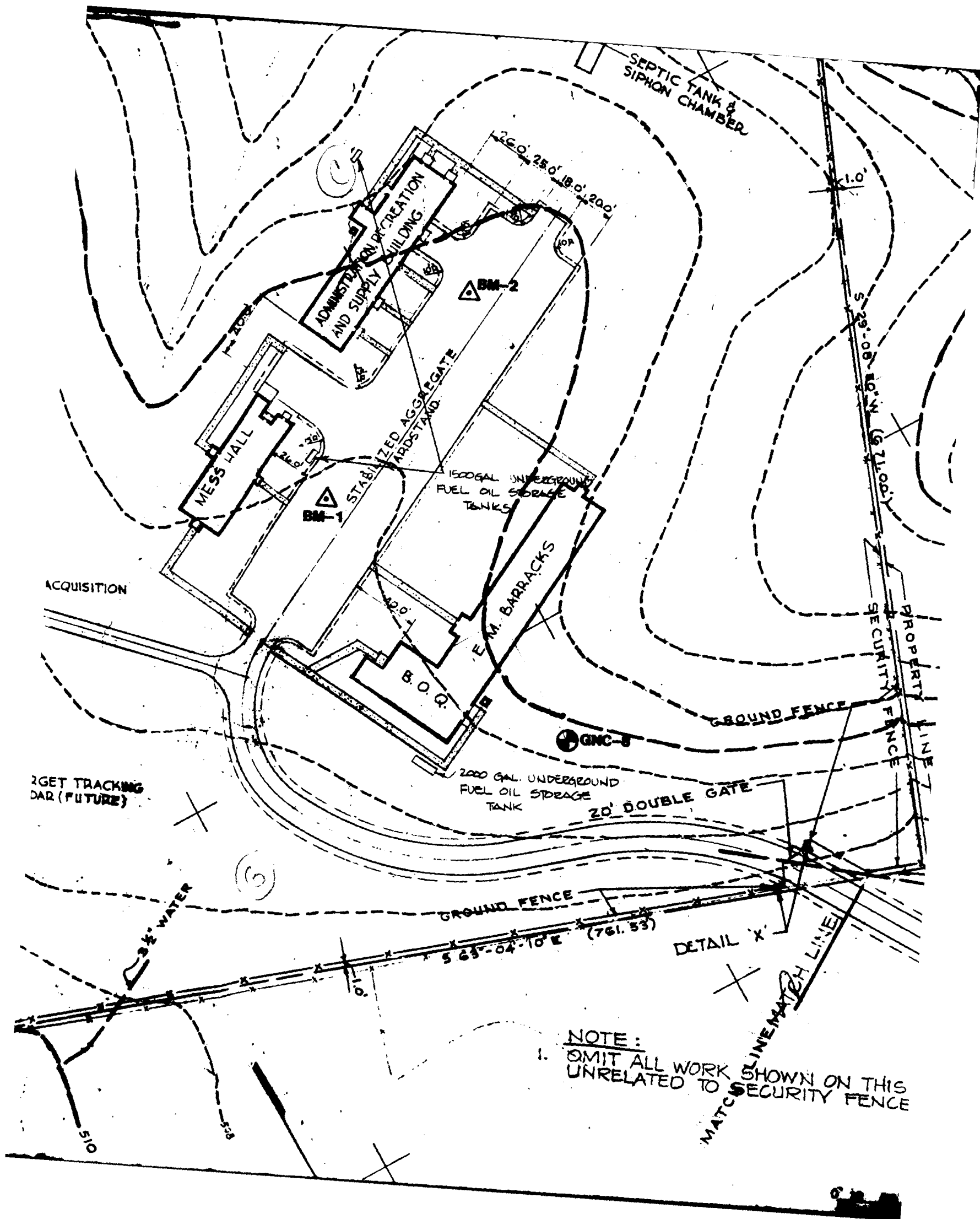




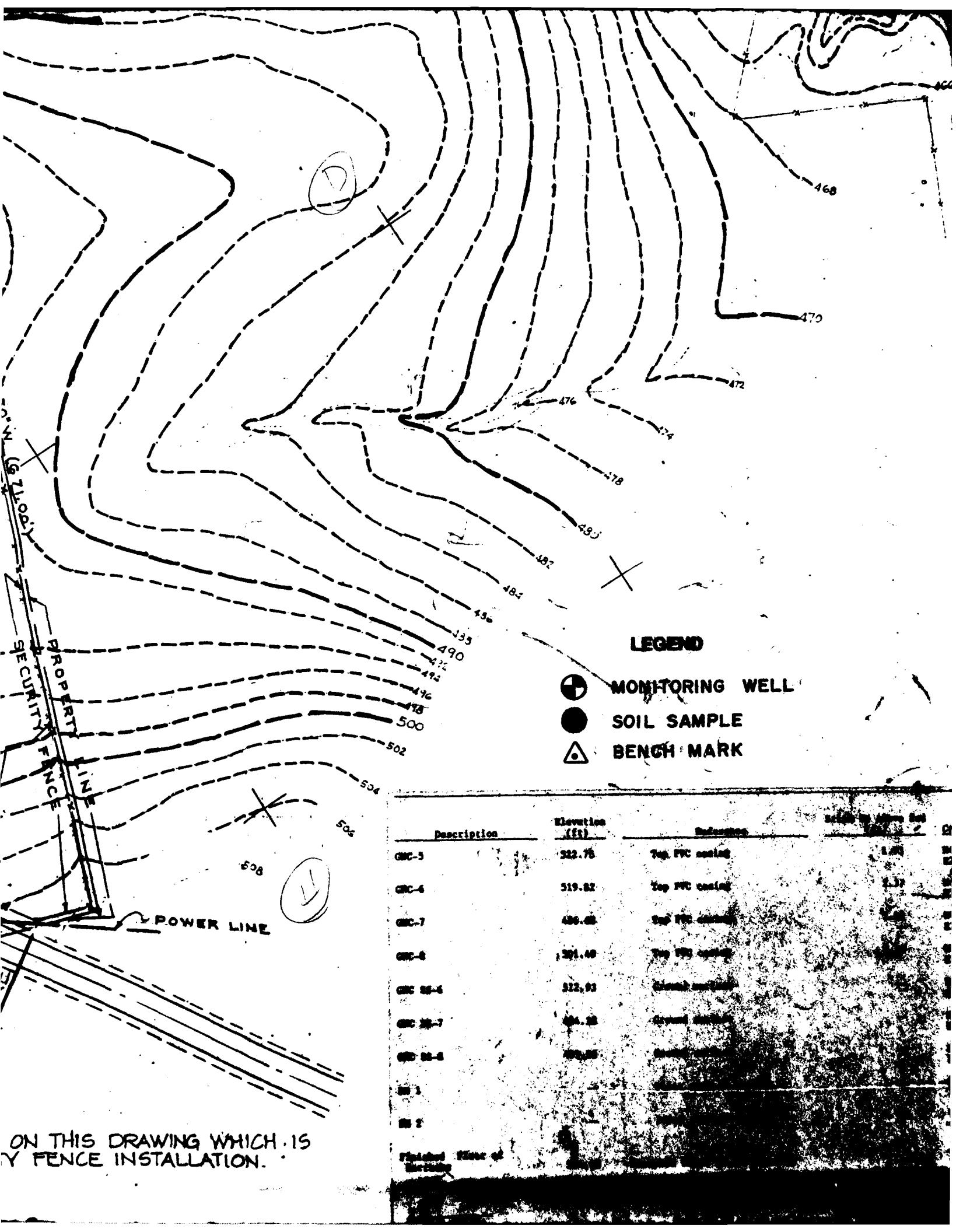








NOTE:
1. OMIT ALL WORK SHOWN ON THIS
UNRELATED TO SECURITY FENCE

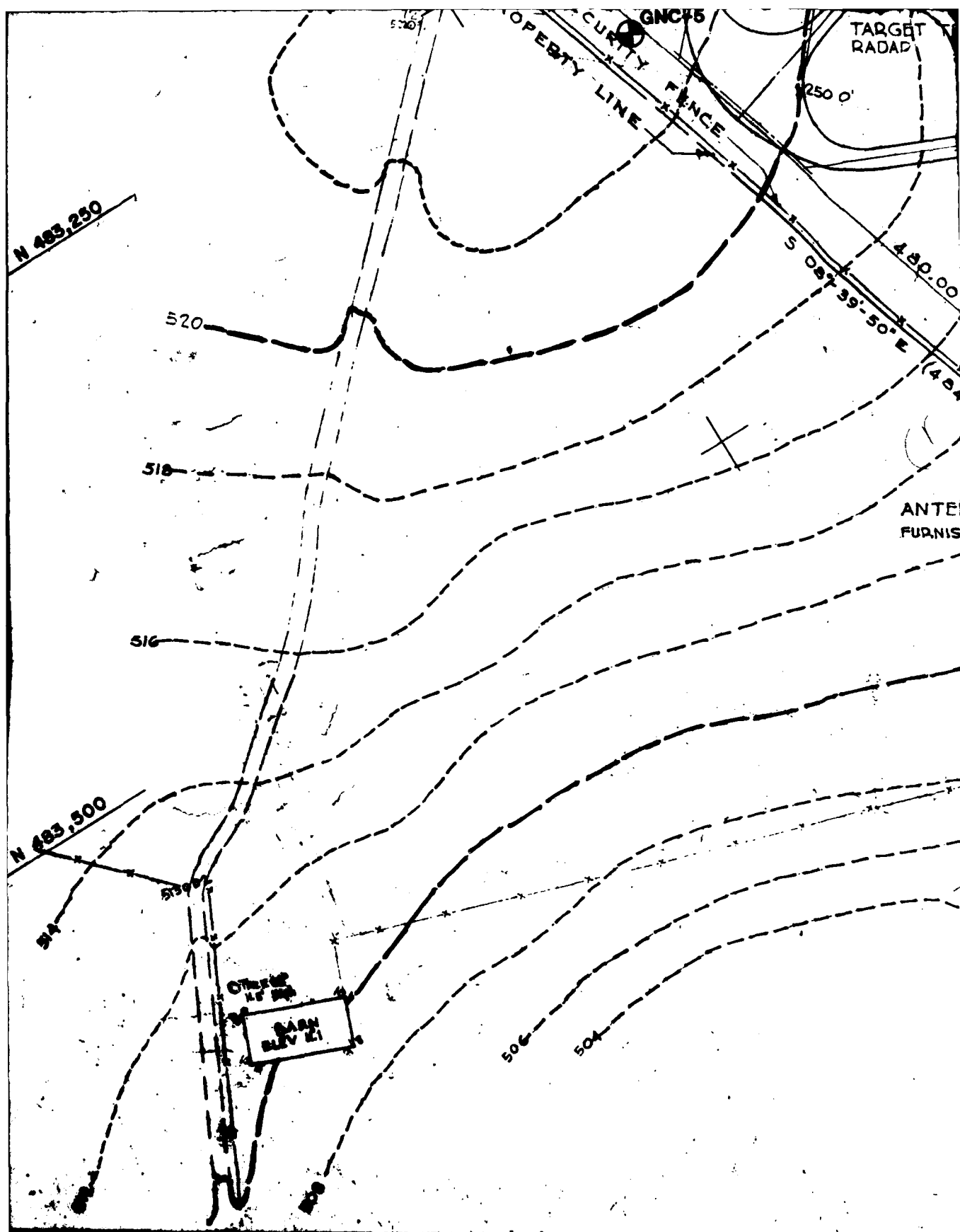


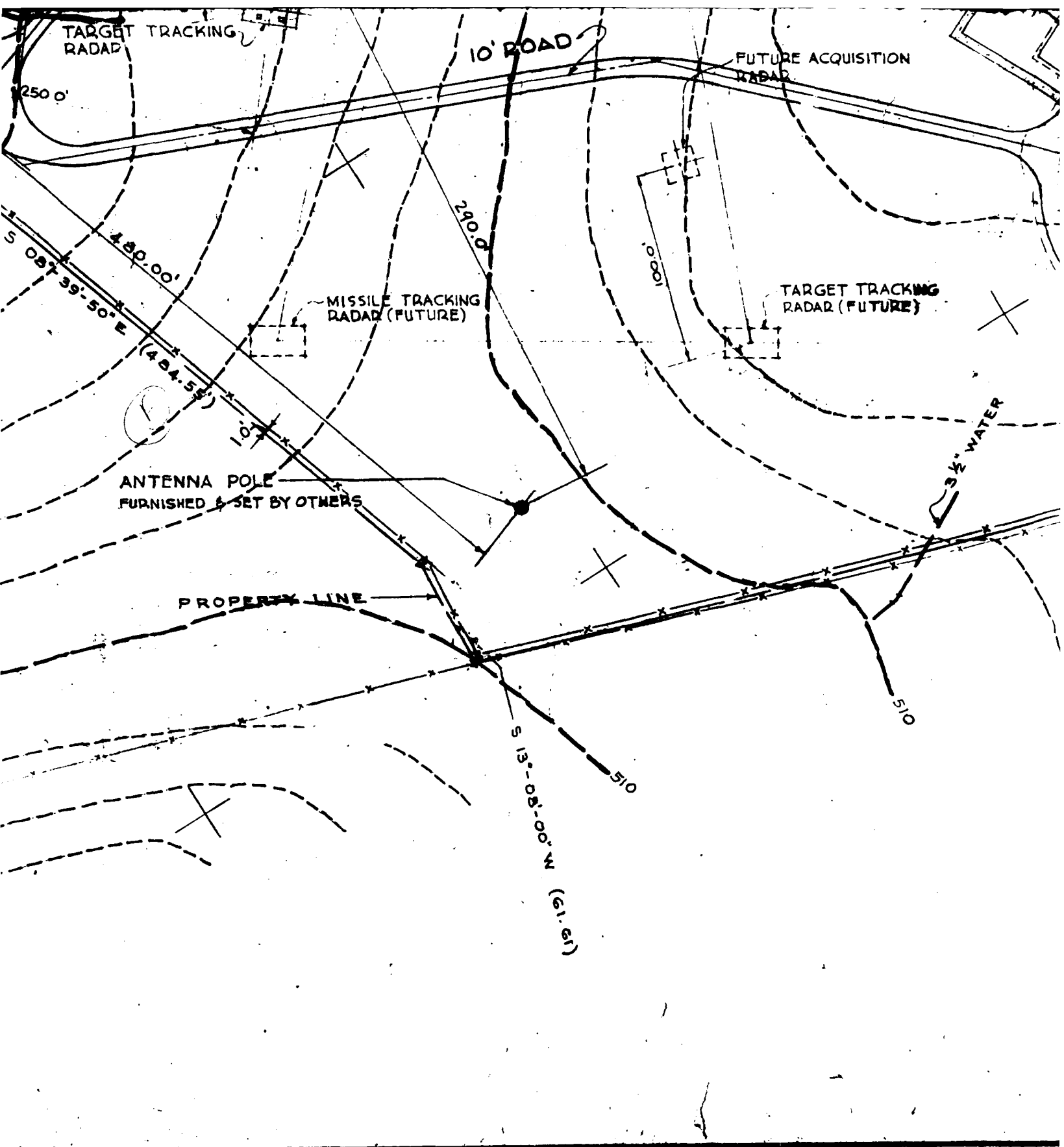
LEGEND

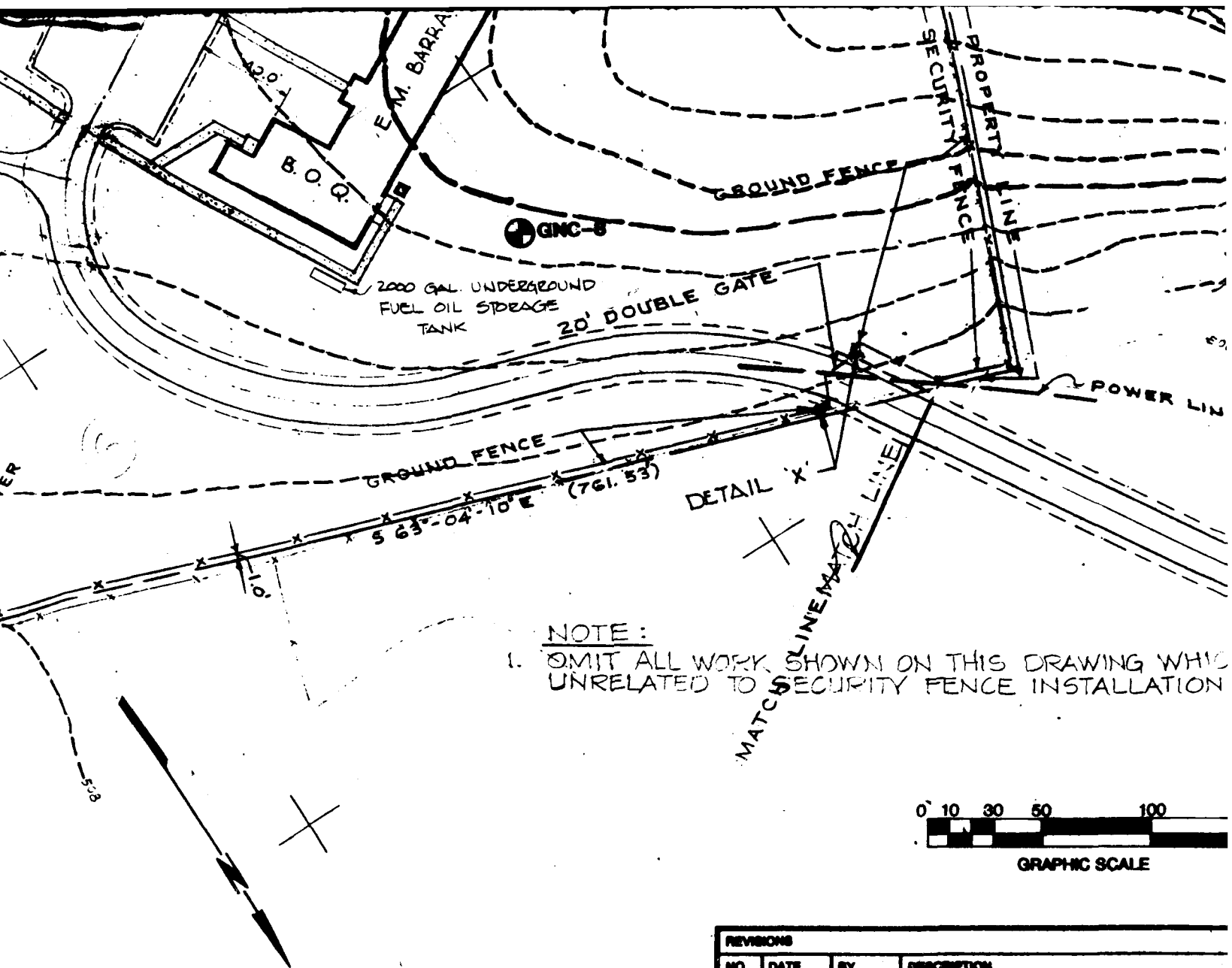
- MONITORING WELL
- SOIL SAMPLE
- BENCH MARK

| Description | Elevation (ft) | Reference | Notes |
|----------------------------|----------------|----------------|-------|
| GRC-3 | 322.75 | Top PVC casing | 1.00 |
| GRC-4 | 319.82 | Top PVC casing | 1.37 |
| GRC-7 | 486.68 | Top PVC casing | |
| GRC-8 | 391.48 | Top PVC casing | |
| GRC 28-6 | 312.63 | Ground surface | |
| GRC 28-7 | 484.28 | Ground surface | |
| GRC 28-8 | 489.85 | Ground surface | |
| BM 1 | | | |
| BM 2 | | | |
| Finished Floor of Building | | | |

ON THIS DRAWING WHICH IS FENCE INSTALLATION.







| REVISIONS | | | |
|-----------|---------|-----|-------------|
| NO. | DATE | BY | DESCRIPTION |
| 1 | 1-15-50 | GML | |

LEGEND



MONITORING WELL



SOIL SAMPLE



BENCH MARK

| Description | Elevation (ft) | Reference | Stick Up Above Pad (ft) | Coordinates |
|-------------------------------|-------------------|-------------------------------|----------------------------|--------------------|
| GNC-5 | 522.75 | Top PVC casing | 1.93 | N483311 E750688 |
| GNC-6 | 519.82 | Top PVC casing | 2.37 | N483247 E750522 |
| GNC-7 | 486.68 | Top PVC casing | 2.02 | N483369 E749673 |
| GNC-8 | 501.49 | Top PVC casing | 2.35 | N483822 E750026 |
| GNC SS-6 | 512.93 | Ground surface | -- | N483223 E750479 |
| GNC SS-7 | 484.18 | Ground surface | -- | N483385 E749709 |
| GNC SS-8 | 489.82 | Ground surface | -- | N483247 E750522 |
| BM 1 | -- | Paint mark on asphalt | -- | N483621 E750086 |
| BM 2 | -- | Paint mark on asphalt | -- | N483546 E749946 |
| Finished Floor of Barracks | 504.00 | Finished floor of EM Barracks | -- | -- |

GENERAL NOTES:

1. Drawing based on Army Corps of Engineers, Washington District, Washington, D.C., Master Plan, Basic Information Maps, Detail Boundary Map, Drawing Number 18-02-67.
2. Coordinates established by EA Survey May 1989. Based on State Planar Coordinate System. Site control was established from off site BM A572 and BM 17232 using Washington Suburban Sanitary Commission 1973 Datum.
3. All elevations refer to Mean Sea Level Datum.
4. Finished floor of EM Barracks was used to establish well elevations.
5. GNL designation refers to Gaitnersburg NIKE Control.

GAITHERSBURG NIKE CONTROL GAITHERSBURG, MD.

SITE MAP

DESIGN

DRAWN

PMS

CHECKED

SAB

PROJECT ENGINEER



EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY, INC.

15 Loveton Circle

Sparks, Maryland 21152

DATE

DEC. 6, 1989

SCALE

PROJECT NO.

10559.04

FIG. 1-3